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CONSUMPTION OF FLUID MILK AND CREAM IN NORTHEASTERN MARKETING AREAS

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CONSUMPTION OF FLUID MILK AND CREAM IN NORTHEASTERN MARKETING AREAS 1/

INTRODUCTION

This report brings to date the series of fluid milk and cream sales in selected Northeastern markets and the estimated per capita consumption of fluid milk and cream in those markets. The first of these reports was published in March 1941 in response to widespread interest in the Northeastern area in publication of accurate data as to the consumption of fluid milk and cream. At the request of the Committee on Statistics of the Northeastern Dairy Conference, the President of the conference asked the Bureau of Agricultural Economics to prepare such a report. Four reports were prepared in March 1941, February 1942, July 1943, and February 1945. The many needs of the various programs arising from the war effort then forced the discontinuance of these reports. The work necessary to bring the various sales and population series up-to-date through this fifth report has now been completed and the Bureau hopes to continue the series further.

In the strictest sense of the term, this is not a report on the consumption of fluid milk and cream. Strictly speaking, it is a report of sales of fluid milk and cream in certain markets. For several reasons, actual consumption of fluid milk and cream, as such, is likely to be somewhat less than is indicated by reported sales. Although an upward bias is known to exist, it cannot be measured quantitatively for any given market. This does not affect the usefulness of the series in internal comparison over time.

As has been pointed out in earlier issues of this report, the chief problems involved in ascertaining per capita consumption of milk and cream in any given area are: (1) Obtaining accurate information as to sales of milk and cream to consumers, and (2) Determining the number of people in the area. With respect to problem (1) above, it is difficult to define a marketing area that will correspond closely to available sales reports. The line of demarcation between markets is not clear-cut, as milk distributors' truck routes crisscross in and out of the selected territory. If the marketing area is expanded to reduce to a minimum the problem of out-of-area sales, collection of sales reports becomes increasingly difficult. Exceptions to this arise when public authority, governing a State-wide area, can obtain rather complete sales reports. In cases like those represented by New Jersey, Connecticut, and Rhode Island, the difference between reported sales and actual sales for the entire State is probably insignificant. Here, however, we have State-wide data and some important differences or changes in consumption rates among marketing areas within these States may be obscured in the State totals.

In this report, three types of marketing areas are covered. Each type corresponds to basic sales reports. Three of the marketing areas -- Rhode Island,

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1/ Prepared by P. E. O'Donnell, Agricultural Statistician, Bureau of Agricultural Economics, under the general supervision of B. H. Bennett, Head, Division of Dairy Statistics. The research on which this report is based was made possible by funds provided by the Agricultural Research and Marketing Act of 1946. Valuable suggestions were made by John L. Wilson, Agricultural Statistician, who also was responsible for compilation of a considerable portion of the historical data. Methods of compilation of the milk and cream sales data are largely those developed by E. E. Vial and carried forward by R. J. Foote and Louis F. Herrmann. Acknowledgment is due also to numerous State and Federal agencies who furnished basic sales data and accompanying comments.

Connecticut, and New Jersey -- cover entire States. Eight marketing areas -- Boston, New York City, Rochester, New York, Buffalo, New York (Niagara Frontier area), Philadelphia, Pittsburgh (Allegheny County), Washington, D. C., and Richmond, Virginia -- cover a central city and specified adjacent smaller cities or towns. One marketing area -- Baltimore, Maryland -- covers only the city proper. Throughout this report the common term "marketing area" is used, regardless of whether the area covered is a central city, a group of cities and towns, or an entire State. Exact description of each area is given in the sections which deal individually with each marketing area.

POPULATION ESTIMATES

For years before 1940, population estimates for the marketing areas covered in this report were obtained by interpolation between the 1930 and 1940 census data. Population estimates for 1940 are based on the April census adjusted to a July 1 date, which is taken as representing the 1940 annual average milk-consuming population. In previous issues of this report, published in 1942, 1943, and 1945, population estimates were made upon the basis of the best information available at the time each report was published. The 1942 issue contained extrapolations for 1941 from the 1930-40 census figures. The 1943 issue contained revised data for 1941 and data for 1942 based upon estimates of the civilian population of metropolitan counties made by the United States Bureau of the Census in May 1942. 2/ The 1945 issue contained further revisions based upon census civilian population estimates as of March 1943 and November 1943.

This report continues unchanged all of the population series for 1940 and prior years which have appeared in previous issues, except for Rochester, New York, for which the 1940 population figure was slightly increased. Revisions of the population for some markets for 1941 and 1942 were made; others were left practically unchanged. Population estimates were constructed for the remaining years through 1947.

Because of dynamic changes caused by the war, sharp changes in population occurred in all of the marketing areas covered in this report. Many problems have arisen in the process of estimating annual average milk-consuming populations in Northeastern markets during the war and the postwar period. It is by no means certain that all these problems have been satisfactorily solved, partly because means were lacking for more exhaustive investigation and partly because of sheer lack of necessary information. Fortunately, some guideposts were available and these were utilized.

Of particular importance were the series of civilian population estimates published by the United States Bureau of the Census in 1943 and 1944 3/ which covered the dates May 1, 1942, March 1, 1943, and November 1, 1943. These estimates of resident civilian population were constructed and published by counties to conform with the issue-of-ration evidence upon which they were based. Although in many cases population estimates of the Bureau of the Census covered areas that did not conform closely to milk-marketing areas, the differences were chiefly differences of size. Although different densities of population and probably different migration magnitudes were also involved, it is believed that the similarities of population characteristics were sufficiently predominant between the milk-marketing areas and the corresponding census areas to permit confident use of the method of proportionate change. There was sufficient

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2/ United States Bureau of the Census, Series P-3 No. 33, February 25, 1943
3/ Series P-3 Nos. 33 and 38. Also Series P-44 No. 3

similarity, also, between milk-marketing areas and the metropolitan districts, as defined by the Bureau of the Census and covered in the series of sample population surveys issued by that Bureau during 1947, to permit use of the method of proportionate change.

By and large, this is the method by which most of the urban milk market populations were calculated for the years 1942, 1943, and 1947. For other years subsequent to 1940, interpolations were made subject to qualifications indicated by various kinds of supplementary data. The latter included net inductions into and discharges from the Armed Forces for the United States as a whole, sundry information as to birth and death rates, population estimates from sources other than the Bureau of the Census, qualitative information as to migration, and other material. Differences between resident civilian population and total resident population in 1947 were ignored as too small to be significant.

Perhaps the method by which use was made of census estimates of civilian population by counties as of May 1, 1942, March 1, 1943, and November 1, 1943 should be indicated in somewhat greater detail. Briefly, the May 1, 1942 civilian population estimate for that county or group of counties which most closely conformed with the designated marketing area was compared with the indicated population for the same area as of April 1, 1940. The difference was assumed to have occurred during the period beginning January 1, 1941 and ending April 30, 1942. The difference, divided by the number of months (16) intervening between the two dates, was assumed to have occurred in a fixed amount over this period. The monthly change thus derived was reduced in proportion to the relation between the population in the milk-marketing area and in the selected county or county group area as of April 1, 1940. The resulting monthly change was added or subtracted, as the case indicated, to the July 1, 1940 population for the marketing area. An annual average population for 1941 was then obtained from the 12 monthly figures. The same method was applied in obtaining the 1942 and 1943 population estimates except that, in these cases, indicated year-end populations for December 31, 1941 and December 31, 1942 were used as starting points rather than a midyear figure as in the case of 1940. The method could obviously be further refined, but such refinements would very probably yield little practical benefit.

It is likely that the estimates of annual average milk-consuming populations derived in this way understate the total milk-consuming populations in the nine urban milk marketing areas covered in this report. They do not take fully into account (a) increases in the transient civilian population, (b) increases in the transient military population, and (c) increases in military forces detailed in these urban areas. All three groups were a part of the milk-consuming population in these markets. It is clearly indicated that for the year 1941, and much more importantly for 1942 and 1943, our estimates understate population and result in overstated per capita consumption rates.

Countervailing factors may have been at work also, but of this we cannot be sure nor could we develop any measures of these, if they actually existed. Some efforts were made to develop quantitative estimates of items (a) to (c) above, but the attempts were abandoned, except when otherwise noted, in the absence of reliable quantitative measures. But it is not believed that differences of this kind between estimated and actual milk-consuming populations would exceed 3 percent for the year 1943 and 2 percent or less for 1942 in any of the nine urban markets covered in this report. Moreover, population may have been slightly overstated in the more central portions of these urban marketing areas because civilians were permitted to register for ration evidence at points convenient to them. This may have resulted in some useful offsetting upward bias in the indicated civilian populations because of registration at a point inside the marketing area by civilians who bought their milk outside the area. Details as to population estimates for particular marketing areas for the years 1944, 1945, and 1946 are discussed separately for each area, as a generalized method was not used in these cases. Small annual subtractions in population were also made in four of the urban marketing areas -- Allegheny County, Niagara Frontier (Buffalo), Rochester, and Richmond -- to allow for estimated numbers of people in these areas who live on places where milk cows are kept. Presumably these groups did not buy fluid milk and cream.

For the entire States of Rhode Island, Connecticut, and New Jersey, and for the Washington, D. C. Metropolitan Area, annual estimates of total resident population published by the United States Bureau of the Census were available. July 1 populations, as indicated in these reports, adjusted downward in the case of the three States by estimates of numbers of people living on places where cows are kept, were used as measures of the milk-consuming populations. *

Estimated milk-consuming populations for all the marketing areas covered in this report for the period 1940-47 are shown in table 1. Area designations indicate the milk-marketing areas as defined in detail later in this report and, with one exception -- Baltimore -- cover a greater area than that of the central city. The marketing area for each of the three States shown in table 1 is taken as the entire State.

The population estimates for 1947 are probably better than those for any other year after 1940. The Bureau of the Census has pointed out 4/ that its 1947 population estimates for metropolitan districts are subject to sampling variation, as the figures published are based upon samples taken in each district. They may differ somewhat from the figures that would be obtained if a complete census were taken.

Table 1.- Estimated annual average populations using purchased milk in selected northeastern marketing areas 1940-47

Area	Year								Percentage change 1947 / 1940
	1940	1941	1942	1943	1944	1945	1946	1947	
	-- Thousands --								Pct.
Washington, D. C. metropolitan area	977	1,098	1,193	1,288	1,317	1,298	1,241	1,269	+29.9
Connecticut	1,617	1,631	1,687	1,677	1,670	1,679	1,845	1,906	+17.9
Rhode Island	694	691	700	719	747	721	727	730	+ 5.2
New Jersey	4,057	4,074	4,081	4,064	4,051	4,031	4,431	4,553	+12.2
Boston, Mass.	2,020	2,012	1,993	1,953	1,948	1,958	2,096	2,141	+ 6.0
New York, N. Y.	8,650	8,570	8,400	8,250	8,200	8,320	8,950	9,200	+ 6.4
Rochester, N. Y.	415	411	405	403	407	412	457	470	+13.3
Niagara Frontier, N.Y.	894	898	901	899	892	900	950	960	+ 7.4
Philadelphia, Pa.	2,349		2,375	2,377	2,390	2,415	2,480	2,530	+ 7.7
Allegheny Co., Pa.	1,394	1,382	1,370	1,334	1,284	1,302	1,432	1,470	+ 5.5
Baltimore, Md.	850	860	880	927	910	910	943	946	+10.0
Richmond, Va.	243	244	250	256	255	255	272	276	+13.6

4/ U. S. Bureau of the Census Series P-21 No. 35, August 24, 1947, p. 4.

* For method used in Washington, D. C. area see p. 28.

CHANGES IN DAILY AVERAGE SALES OF CLASS I MILK

In table 2 are shown daily average sales of class I milk, by years, by marketing areas for the 1940-47 period. As is to be expected, the market area in which population showed the greatest percentage gain over this period -- Washington, D. C. -- also had the greatest percentage gain in daily average sales of class I milk. Three market areas -- Connecticut, Niagara Frontier, and Allegheny County -- showed an uninterrupted annual increase in daily sales of class I milk for each year subsequent to 1940. Five market areas -- Boston, New York, Rochester, New Jersey, and Richmond -- showed uninterrupted annual increases in daily average sales of class I milk for each year between 1940 and 1946, but all five areas showed lower daily average class I sales of class I milk in 1947 than in 1946. The Rhode Island area, in which the number of military personnel considerably influenced sales of fluid milk during the war years, showed a steady annual increase in class I sales through 1945. Demobilization, however, brought a decline in 1946. Sales also declined in 1947, but in this case reduction in military personnel stationed in the State was not important.

Sales in the Baltimore market declined in 1944, 1946, and 1947. The decline in 1944 may have been caused by shortages in supply. Population in the area also declined about 1.8 percent from 1943. The sales decline was small, six-tenths of one percent. Sales also declined in 1946 and 1947, although the population increased. In the Washington, D. C. Metropolitan Area, daily average sales of milk and milk drinks declined in 1944 from the 1943 level; otherwise, they showed an annual increase each year through 1946. Data as to 1947 sales are not available. In the Philadelphia area, daily average sales of class I milk increased each year from 1942 through 1946, but they declined rather substantially in 1947.

Table 2.- Summary of daily average sales of class I milk in selected Northeastern markets, 1940 and 1942-47

Market area	1940	1942	1943	1944	1945	1946	1947	Percentage change 1947 over 1940
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	Percent
Boston, Mass.	726	810	849	874	911	942	909	+25
Rhode Island	204	251	286	304	314	311	1/ 301	1/ +48
Connecticut	560	683	730	753	796	832	856	+53
New York City, N. Y.	3,182	3,339	3,515	3,668	3,836	4,032	3,980	+25
Niagara Frontier, N.Y.	230	280	320	333	346	364	365	+59
Rochester, N. Y.	131	144	156	160	170	181	180	+37
New Jersey	1,267	1,447	1,602	1,675	1,760	1,850	1,813	+43
Philadelphia, Pa.	-	853	927	927	969	990	948	2/ +11
Allegheny County, Pa.	309	366	389	409	430	460	470	+52
Baltimore, Md.	207	260	313	311	327	323	3/ 300	3/ +45
Washington Met. Area	270	407	464	462	497	508	-	4/ +88
Richmond, Va.	44	54	61	67	74	80	78	+77

1/ 7-month average January - July.
2/ 1947 in relation to April - December, 1942.
3/ 11-month average.
4/ 1946 over 1940.

CHANGES IN DAILY AVERAGE SALES OF CLASS II MILK

In table 3 are summarized daily average sales of class II milk in those marketing areas for which data relating to sales of class II milk or fluid cream are available. It will be seen that only the Allegheny County area had recovered a level of daily average sales of fluid cream, in milk equivalent terms, in 1947 which was equal to that of 1940. In all other marketing areas shown, cream sales in 1947 were below those of 1940 despite increases in the cream-consuming population. The Rochester, New York marketing area was only 2 percent lower in cream sales in 1947 than in 1940. Examination of table 3 reveals that although the changes in cream sales by years following 1940 were not uniform among these markets, they do show a marked resemblance in pattern. A War Production Board order, effective November 25, 1942, limited the butterfat content of cream for consumption as fluid cream to a maximum of 19 percent. This order was in effect until September 1, 1945 when it was revoked. Sales of fluid cream declined markedly under the restrictive effect of the cream sales limitation order. Monthly sales data contained in the Appendix reveal substantial increases in sales of fluid cream after September 1, 1945.

Shortages of butterfat forced a reimposition of this order on July 1, 1946 and sales of cream again declined. The order was revoked on November 20, 1946 but sales of fluid cream in 1947 generally 5/ failed to exceed the levels of 1946. Presumably, the substantially higher level of retail prices for fluid cream in 1947 than in 1946, together with the enforced wartime habit of lower consumption of fluid cream, more than offset the effect of removal of limitations on the maximum butterfat content of cream sold for fluid consumption.

Table 3.- Summary of daily average sales of class II milk 1/ in selected Northeastern markets, 1940 and 1942-47

Market area	1940	1942	1943	1944	1945	1946	1947	Percentage change 1947 over 1940
	100 quarts	100 quarts	100 quarts	100 quarts	100 quarts	100 quarts	100 quarts	Percent
Rhode Island	2/ 635	2/ 728	2/ 531	2/ 422	530	744	3/ 575	- 9
New York City	11,478	9,384	4,474	4,280	5,735	6,017	7,279	-37
Niagara Frontier	611	593	420	386	446	593	532	-13
Rochester	246	265	176	149	173	258	240	- 2
New Jersey	3,467	2,996	1,844	1,855	2,492	3,473	3,152	- 9
Allegheny County	775	775	571	546	682	922	773	0
Baltimore	348	311	242	305	277	301	4/ 262	-26
Richmond	93	95	70	64	72	81	77	-17

1/ Milk equivalent of fluid cream.
2/ 123-day average, January, April, July, October.
3/ 212-day average, January-July.
4/ 334-day average, January-November.

5/ Except in the New York City area. See the discussion of the New York City area on pp. 14-15.

CHANGES IN PER CAPITA CONSUMPTION

In table 4 are brought together the indicated per capita consumption of fluid milk for the years 1940 and 1947 for all markets except Philadelphia that are covered in this report. Data for 1940 are not available for Philadelphia and that market is therefore discussed separately. Data covering sales of fluid cream, also shown in this table, are not available for Boston, Connecticut, and Washington, D. C., and they are incomplete for the New York City area. 6/

It is at once apparent that marked increases in per capita consumption of fluid milk have occurred in all markets and that substantially greater percentage gains have been made in some markets than in others. Equally apparent are substantial declines in sales of fluid cream. Combined per capita consumption of fluid milk and cream for those markets for which data on both are available also increased substantially over the 1940 rates, but the combined consumption rates show much less impressive gains over 1940 than do the consumption rates for fluid milk alone. Presumably, the rates of per capita consumption of fluid cream in the Boston, Connecticut, Philadelphia, and Washington, D. C. marketing areas were also lower in 1947 than in 1940, but statistical confirmation is lacking.

Closer inspection of the data in table 4 reveals that, by and large, the greatest percentage increases in per capita consumption of fluid milk between 1940 and 1947 occurred in those markets in which, in 1940, absolute levels of consumption were low. Striking percentage gains were recorded in the Richmond, Niagara Frontier, and Allegheny County markets, all of which were among the lowest four in point of levels of per capita consumption in 1940. The smallest percentage gains in per capita consumption of fluid milk were recorded in the New York, Boston, Rochester, Connecticut, and New Jersey markets, which were among the top five in per capita consumption in 1940. An exception to the former group is noted for Baltimore, which, although it was among the lowest four market areas in consumption of fluid milk in 1940, did not manage to keep among the four markets which showed the greatest percentage gain in 1947 over 1940. Baltimore was exceeded by both the Washington, D. C., and the Rhode Island areas.

Some precautionary observations should be made at this point in the matter of composition of fluid milk sales among these markets. The Baltimore, Allegheny County, and Richmond sales series do not include skim milk and part-skim items such as buttermilk, chocolate drink, and other miscellaneous uses which are included in the sales reports for the other areas. Possibly, if the volume of sales of these items for these three markets were included in the calculations of per capita consumption rates the percentage gains and relative standing of these markets in both 1940 and 1947 would differ from those shown in table 4. Certainly the levels of per capita consumption in both periods would be higher for Richmond, Baltimore, and Allegheny County. The gains that would be shown in both periods might be substantial for Richmond and Baltimore, and less so for Allegheny County.

According to table 4, Connecticut leads the Northeastern marketing areas covered in this report in the level of per capita consumption of fluid milk in 1947, thus displacing New York City. But small errors in population estimates in either or both market areas could easily change the relative standing. The indicated difference is only four-hundredths of a pint per capita daily. Boston leads Rhode Island for third place by a small margin. In this connection, all the marketing areas covered in this report showed some decline in per capita consumption of fluid milk from 1946 to 1947. However, the decline in Connecticut and in the Niagara Frontier area was very small.

6/ See the discussion for New York City for details.

The indicated per capita consumption of fluid cream was substantially lower in 1947 than in 1940 in all of the markets for which data as to sales of cream are available. The sharpest decline occurred in the market which had the highest per capita consumption of cream in 1940, (New York City), but the Baltimore market showed almost as great a percentage decline. If the New York City sales data for fluid cream could be corrected for use of portions of class II-B or storage cream in the short period in 1947, the apparent decline from the 1940 level of consumption would be lessened. 7/ The New York market was the only one to show an increase in per capita consumption of fluid cream in 1947 over the 1946 level. All the other markets experienced a decline in 1947 from the peak postwar level of consumption reached in 1946.

For milk and cream taken together, all market areas, except New York City, showed increases each year from 1940 through 1945. In New York City the substantial decline in sales of fluid cream under Government restrictions caused a decline in 1943 in the per capita consumption of milk and cream expressed in milk equivalent terms. The Niagara Frontier, Allegheny County, and Richmond markets registered increases every year after 1940 through 1946 and Rhode Island showed increases in every year except 1944. From 1946 to 1947, in all the market areas which report sales of both fluid milk and cream, per capita consumption of both items expressed in milk equivalent terms declined.

Indicated annual changes for the years 1942-45 in per capita consumption of fluid milk, fluid cream, and the milk equivalent of both taken together probably are not closely accurate. There are undoubtedly some errors in estimates of population which very likely cannot be exposed and rooted out. Supply shortages during some of the war years prevented the achievement of a greater volume of sales by milk distributors. The restrictive effect of quotas on sales of fluid cream, particularly, and to a lesser degree on fluid milk, caused sales volume to be less than it would have been under usual free market conditions.

Table 4.- Changes in daily per capita consumption of fluid milk and cream by markets, 1940 and 1947

Market area	Daily per capita consumption						Percentage change 1947 over 1940		
	Milk		Cream		Milk & cream in milk equivalent		Milk	Cream	Milk and cream in milk equiv
	1940	1947	1940	1947	1940	1947			
	Pints	Pints	Pints	Pints	Pints	Pints	Percent	Percent	Percent
Boston	0.72	0.85	-	-	-	-	+18	-	-
Rhode Island	0.59	0.83	0.18	0.16	0.78	0.98	+41	-11	+26
Connecticut	0.69	0.90	-	-	-	-	+30	-	-
N. Y. C.	0.74	0.86	0.26	0.16	1.00	1.02	+16	-38	+ 2
Niagara Frontier	0.51	0.76	0.14	0.11	0.65	0.87	+49	-21	+34
Rochester	0.63	0.77	0.12	0.10	0.75	0.87	+22	-17	+16
New Jersey	0.63	0.80	0.17	0.14	0.80	0.94	+27	-18	+18
Allegheny Co.	0.46	0.65	0.11	0.10	0.57	0.75	+41	- 9	+32
Baltimore	0.48	0.63	0.08	0.05	0.56	0.69	+31	-37	+23
Wash.,D.C.	0.55	0.76	-	-	-	-	+38	-	-
Richmond	0.36	0.53	0.07	0.05	0.43	0.58	+47	-29	+35

7/ See the discussion under New York Marketing area P.14.

GREATER BOSTON MARKETING AREA

This area covers 37 cities and towns in greater Boston. 8/ The population estimate for the year 1941 was interpolated between the 1940 census figure, adjusted to a July 1 date, and the census estimate of May 1, 1942. 9/ The 1942 and 1943 population estimates are based on the census estimate for May 1942, mentioned above, and those for March 1, 1943 and November 1, 1943 10/ adjusted upward to allow for military personnel in the area. Interpolation was used to establish a population estimate for 1944 which falls between the 1943 estimate and the Massachusetts Decennial Census taken as of January 1, 1945. This State census, which included all legal residents of Massachusetts whether or not they were in the Armed Forces, was adjusted to exclude Massachusetts residents who were members of the Armed Forces and to include military personnel stationed in the area. The 1945 estimate was also based on the Massachusetts census. The 1946 estimate was interpolated between the established 1945 figure and the United States Bureau of the Census population survey of April 1947. The latter also served as the chief basis for establishing the 1947 population estimate.

The 1947 population estimate used in this report falls slightly short of the census estimate of April 1947 in the proportion of indicated growth for the Greater Boston milk-marketing area over the 1940 population. The census survey covers the Boston Metropolitan District which in 1940 contained about 330,000 more people than the marketing area, as defined under Federal Order No. 4. Indications of greater proportionate growth of population in peripheral areas than in areas close to the center of population after 1945 formed the basis for this downward adjustment in the 1947 population estimate for the milk-marketing area. It is believed that the population estimates for Greater Boston for the 1941-47 period are reasonably representative of the average annual milk-consuming population in the area.

The data as to sales of class I milk in the Greater Boston marketing area are based on data supplied by the Federal Milk Market Administrator for that market. Published reports of the Market Administrator show the sales of class I milk in the Boston marketing area and in the "adjoining area." Sales within the marketing area of milk received from sources other than the regularly established milkshed were also included. The sales data have been adjusted to exclude sales made in the adjoining area. The Market Administrator supplied estimates of the proportion of class I sales in the adjoining area to class I sales in the combined marketing and adjoining area for the period January 1940 through May 1943. For the period beginning November 1, 1946, the Market Administrator has reported class I sales in the marketing area only. It was estimated that the proportion of adjoining area sales to total sales probably varied little during the period August 1937 through December 1939 from the average monthly proportions during the 1940-43 period and adjustments in the sales data were made on this basis. However, on the basis of comparison between the 1940-43 relationships with those for 1947, it appeared that the proportion of adjoining area sales to sales in the combined area was much larger in 1947 than in the earlier period. It was assumed that the increase occurred at a constant percentage rate during 1944, 1945, and 1946. Estimated proportions were calculated on this basis and the resulting adjoining area sales were deducted from reported combined area sales.

8/ Arlington, Belmont, Beverley, Boston, Braintree, Brookline, Cambridge, Chelsea, Dedham, Everett, Lexington, Lynn, Malden, Marblehead, Medford, Melrose, Milton, Nahant, Needham, Newton, Peabody, Quincy, Reading, Revere, Salem, Saugus, Somerville, Stoneham, Swampscott, Wakefield, Waltham, Watertown, Wellesley, Weymouth, Winchester, Winthrop, and Woburn. 9/ United States Bureau of the Census Series P-3, No. 33. 10/ United States Bureau of the Census, Series P-3 No. 38 and P-44 No. 3.

Class I milk in the Boston area includes all fluid milk products the utilization of which is not established as class II milk. Class II milk is "all fluid milk products the utilization of which is established:

1. As being sold distributed or disposed of other than as or in milk; and other than as or in flavored milk or flavored skim milk, buttermilk, or cultured skim milk, for human consumption; and

2. As plant shrinkage, not in excess of 2 percent of the volume handled." The sales data, therefore, contain certain skim milk items, excess plant loss, and any other items which are not classified as class II milk. They include relief milk sales for the 1938-43 period also.

Table 5.- Sales of class I milk in the Greater Boston, Massachusetts, marketing area, population, and daily per capita consumption, 1937-47

Year	Annual sales of class I milk 1/	Population using purchased milk 2/	Daily consumption per capita
	1000 pounds	Thousands	Pints
1937	3/ 238,725	2,014	0.721
1938	583,270	2,016	.737
1939	578,525	2,018	.731
1940	571,326	2,020	.719
1941	598,235	2,012	.758
1942	635,830	1,993	.813
1943	666,490	1,953	.870
1944	687,714	1,948	.897
1945	715,400	1,958	.931
1946	739,490	2,096	.899
1947	713,210	2,141	.849

1/ Compiled from records of the Boston Federal Milk Market Administrator. Computed by adjusting sales in the "Boston marketing area and adjoining areas" downward to exclude "adjoining areas". Includes relief milk 1937-43.

2/ Estimated resident population.

3/ August - December, 153 days.

RHODE ISLAND

Data relating to sales of milk which were used for computing per capita consumption were supplied by the Rhode Island Milk Control Board. All milk distributors, including producer-distributors who do business in the State and who sell more than 20 quarts per day, must obtain a license from the Milk Control Board and they must make reports as to purchases, sales, and utilization of milk. The Board audits dealers' books and verifies the reports submitted.

Milk for fluid use as used in computing per capita figures includes class I milk reported to the Milk Control Board plus an estimate of sales by dealers who are not required to report. Class I milk, as defined by the Milk Control Board, includes that for distribution as whole milk, flavored milk drinks, buttermilk, and other milk not specifically covered in class II. Included in class II is milk used for cream, for plain skim milk, for manufactured dairy products, milk unfit for human consumption, and plant shrinkage up to 2 percent.

Statistics of cream sales used in calculating per capita consumption are those compiled by the Milk Control Board from dealers' reported sales in 4 months of the year (January, April, July, and October) for 1936-44 and monthly for 1945-47. Conversion factors for computing the milk equivalent of cream were based on an average milk test of 3.95 percent prior to 1944 and 3.90 percent in recent years. These tests are estimates, based in part on butterfat content of samples analyzed by the city of Providence Milk Department. Conversion factors also include allowance for the difference in weight of equal volumes of milk and cream.

Population figures used for Rhode Island are designed to include all people residing in the State who do not live on places where milk cows are kept. Census estimates of the July 1 resident population 11/ were used as the total population for the State. From these were subtracted an approximate number of people who were living on places on which milk cows were kept. These figures were obtained by multiplying the number of herds inspected for disease through the Office of Animal Industry by an estimated number of people per place based on census records of population per farm. As thus prepared, the population figures are designed to represent the people who depend upon purchased milk. Members of the Armed Forces who reside in the State are included.

11/ United States Bureau of the Census, Current Population Reports, Series P-25 No. 2, issued August 15, 1947 and Series P-25 No. 12, issued August 9, 1948.

Table 6.- Sales of milk and cream for fluid use in Rhode Island, population and daily per capita consumption, 1935-47

Year	Milk sold for fluid use during year 1/	Cream sold for fluid use 123 days 2/: 40% cream basis	Cream sold for fluid use 123 days 2/: Milk equiv. 4/	Population using purchased milk 3/	Daily per capita consumption: Milk	Daily per capita consumption: Cream (milk equiv.)	Daily per capita consumption: Milk & milk equiv. of cream
	1,000 quarts	1,000 quarts	1,000 quarts	Thousands	Pints	Pints	Pints
1935	69,509			658	0.579		
1936	70,555	681	6,725	666	.579	0.164	0.743
1937	73,970	654	6,455	675	.600	.156	.756
1938	72,010	618	6,099	677	.583	.147	.730
1939	72,937	692	6,825	684	.584	.162	.746
1940	75,358	792	7,813	694	.593	.183	.776
1941	82,397	898	8,867	691	.653	.209	.862
1942	92,035	907	8,950	700	.720	.208	.928
1943	104,928	662	6,533	719	.800	.148	.948
1944	111,805	519	5,189	747	.818	.113	.931
1945	115,123	1,935 5/	19,347 5/	721	.875	.147	1.022
1946	113,847	2,715 5/	27,146 5/	727	.858	.205	1.063
1947	63,985 6/	1,219 6/	12,195 6/	730	.827	.158	.985

1/ Sales of class I milk reported to the Rhode Island Milk Control Board plus estimated sales by dealers not required to report.

2/ Dealers sales in January, April, July, and October as compiled by the Milk Control Board.

3/ July 1 resident population less estimated number on places where cows are kept.

4/ Prior to 1944 assumes milk test of 3.95 percent fat and allows for difference in weight of milk and cream. For 1944 on, milk test was estimated at 3.90 percent fat.

5/ Yearly basis.

6/ January-July, 212 days.

CONNECTICUT

Data showing sales of milk in Connecticut included in this report are those compiled by the Economic Service, University of Connecticut, from records of the Connecticut Milk Market Administrator and the Connecticut Dairy and Food Commission. Sales include both Connecticut - produced and imported milk sold in the State. Details of the series were published by McLeod and Clarke in Milk Production and Consumption Trends, Connecticut (Storrs) Agricultural Experiment Station Bulletin 254, 1945.

Data relating to consumption of fluid milk include both class I and class I-A milk. Class I includes fluid whole milk and the milk equivalent of butterfat used in flavored milk drinks. Class I-A includes skim milk used in skim drinks and skim milk used in flavored milk drinks not accounted for in class I.

Population figures used for Connecticut are designed to include all people who reside in the State, except those living on places where milk cows are kept. Census estimates of the July 1 resident population were used as the total population of the State. From these were subtracted an approximate number of people living on places where cows are kept. Figures showing the number of herds under disease-inspection supervision of the Bureau of Animal Industry and people per farm figures based on Census of Agriculture data were multiplied to obtain the number of people on farms with cows. The population figures thus represent the number of people who depend upon purchased milk. This includes members of the Armed Forces who resided within the State.

Table 7.- Sales of class I milk in Connecticut, population, and daily per capita consumption, 1938-47

Year	Annual sales of class I milk 1/	Population using purchased milk 2/	Daily per capita consumption
	1,000 pounds	Thousands	Pints
1938	408,500	1,593	0.654
1939	423,400	1,606	.672
1940	441,100	1,617	.693
1941	465,300	1,631	.727
1942	536,300	1,687	.810
1943	573,000	1,677	.871
1944	592,100	1,670	.901
1945	624,700	1,679	.949
1946	652,800	1,845	.901
1947 3/	671,500	1,906	.898

1/ Computed from data compiled by Economic Service, University of Connecticut, from records of the Connecticut Milk Administration and the Connecticut Dairy and Food Commission. Includes class I and I-A milk sales of Connecticut - produced and imported milk by dealers and producer-dealers.

2/ Resident population as published by the United States Bureau of the Census, less estimated number on places where cows are kept.

3/ Preliminary.

NEW YORK CITY MARKETING AREA

Population estimates for the New York Metropolitan Milk Marketing Area 12/ for the years 1942, 1943, and 1947 were based upon estimates released by the United States Bureau of the Census with some small adjustments. The census estimates were published for separate counties for 1942 and 1943. The 1947 estimates are available for the group of counties in the New York division of the New York-Northeastern New Jersey Metropolitan District. Sufficiently close correspondence 13/ exists between the milk-marketing area and the New York division of the metropolitan district to permit estimation by proportionate change. For the year 1941 an estimate of population was made by straight-line interpolation, with a small adjustment to cover military forces and transient civilians living in the area. For 1944, 1945, and 1946, estimates of population were made in which were utilized information relating to mobilization and demobilization for the United States and annual vital statistics reported for New York City. The resulting year to year changes are gross approximate estimates. They appear reasonable when compared with the experience of other Northeastern urban areas in the light of available qualitative information covering migration 14/ and they appear to fit reasonably well into a pattern of population changes for the period 1943-47. The estimate for the year 1947 is based upon the indicated civilian population in April 1947 in the New York division of the New York-Northeastern New Jersey Metropolitan District despite the explicit caution contained in the census release. 15/.

If the indicated proportionate change in population between April 1940 and April 1947 for the entire metropolitan district - 9 percent - had been used, the estimated population for the milk-marketing area in 1947 would have been 228,000, or 2.5 percent greater than the figure finally selected. The estimated 1947 milk-consuming population, 9,200,000, shows an increase of 6.4 percent over the 1940 population compared with 6.24 percent for the census estimate for April 1, 1947 in the New York division of the metropolitan district. The caution exercised by the United States Bureau of the Census is well grounded, but the lack of any alternative, to say nothing of better, population estimates argues for use of the census estimate for the New York division, provided its uncertain foundation is clearly made known.

Data relating to sales of fluid milk and fluid cream (milk equivalent) in the

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12/ As defined in Federal Milk Order No. 27 and New York State Order No. 126, this area consists of the city of New York, and the counties of Nassau, Suffolk (except Fisher's Island), and Westchester.

13/ In April 1940, total population in the New York division was 8,708,000 and in the milk-marketing area it was 8,650,000.

14/ Final estimates fall somewhat below those released by the Consolidated Edison Co. of New York City. They differ only very slightly from the results secured if the entire New York-New Jersey metropolitan district were to be employed as the measure of proportionate change. There are reasons for thinking that the New York and New Jersey areas had different population changes.

15/ United States Bureau of the Census Series P-21, No. 25, August 17, 1947. The release contains the following two sentences: "Virtually no change in the size of the population of the New York Division has taken place since 1940 census. The civilian population in April 1947 was estimated at about 9,251,000; the total population enumerated on April 1, 1940 was 8,708,000." The difference of 543,000 (6.24 percent) is ignored for reasons of sampling error.

New York marketing area included in this report were compiled by the office of the Federal Milk Market Administrator under Federal Order No. 27 and New York State Order No. 126. The marketing area includes New York City and the counties of Westchester, Nassau, and Suffolk (except Fisher's Island). Class I-A milk is all milk which leaves a (New York area) plant as milk, or as cultured or flavored milk drinks containing 3.0 percent or more butterfat, except (1) such milk as has not passed through the marketing area but which is ultimately distributed in an area regulated by another order of the Secretary of Agriculture, and (2) such milk which has not passed through the marketing area but including milk which was received directly from producers at a plant in the marketing area and which was ultimately distributed in an area not regulated by an order of the Secretary. Plant and handling losses, route returns, and milk used for standardizing cream are all included in class I-A.

For purposes of this report, milk, the butterfat from which leaves or is on hand at a plant in the form of cultured or flavored milk drinks containing less than 3 percent butterfat, classed as II-A under Federal Order 27, has been included in class I-A (fluid milk) sales. Class II-A milk as shown in this report is all milk, the butterfat from which leaves or is on hand at a plant in the form of sweet or sour cream, unless this milk was established to have been subsequently so handled or marketed as to classify it as having been disposed of as cream outside the marketing area or in the marketing area but in the form of storage cream. This definition raises a problem of understatement of fluid cream sales in the marketing area for the period 1943-47. During shortage months of this period some storage cream was blended with fresh cream for fluid cream use in order to stretch the available cream supplies to meet the demand for fluid cream. Under the Federal-State Order no requirement was listed for reclassification of storage cream so used to class II-A. Consequently, the actual use of fluid cream in the New York City area was greater by an undetermined amount than the statistics of class II-A sales indicate.

Table 8.- Sales of fluid milk and cream in the New York, N. Y., marketing area, population, and daily per capita consumption, 1940-47

Year	Annual sales 1/		Population using purchased milk 2/	Daily consumption per capita		
	Class I (Fluid milk)	Class II-A (Fluid cream)		Milk	Cream (Milk equiv.)	Milk and milk equiv. of cream
	1,000 pounds	1,000 pounds	Thousands	Pints	Pints	Pints
1940	2,504,042	903,333	8,650	0.736	0.265	1.001
1941	2,556,932	865,647	8,570	.760	.258	1.018
1942	2,619,881	736,418	8,400	.795	.223	1.018
1943	2,758,618	351,109	8,250	.852	.108	.960
1944	2,886,682	336,836	8,200	.895	.104	.999
1945	3,010,296	450,072	8,320	.922	.138	1.060
1946	3,163,899	472,178	8,950	.901	.135	1.036
1947	3,122,854	571,217	9,200	.865	.158	1.023

1/ Compiled from reports of the Federal Milk Market Administrator. Class I milk includes milk for fluid use and milk equivalent of butterfat in milk drinks; also includes relief milk.

2/ Estimated resident population.

ROCHESTER, NEW YORK

The Rochester milk-marketing area covers the city of Rochester and 13 surrounding towns. Population in the area is slightly larger than that of the Rochester Metropolitan District; otherwise, the two conform rather closely. Available information as to population includes census estimates of civilian population for Monroe County on May 1, 1942 and March 1 and November 1, 1943. A census estimate as of April 1, 1947 is available for the Rochester Metropolitan District. Population estimates were made for the years 1942 and 1943, based on the census data adjusted to provide an indication of proportionate change. The 1941 estimate was obtained by interpolation between the 1940 base population and the indicated population on May 1, 1942. It was apparent that the indicated 1947 population would call for substantial increases in population above the 1943 level and that it raised a question as to the advisability of extrapolating the monthly absolute population change indicated between March 1 and November 1, 1943. Accordingly, an arbitrary estimate was made for 1944 at a level 1 percent above the 1943 level. This requires that the sum of natural increase plus net migration to the area exceed the sum of net inductions during 1944. In any event, the difference in population (7,000) between this estimate and one obtained by extrapolation from 1943 is not very great (1.7 percent).

For 1945, an increase of 1 percent was assumed in conformity with the experience of other markets. For 1946, an increase of 8 percent was assumed. This is slightly larger than corresponding increases for most other urban markets. It was felt that this assumed increase was reasonable as otherwise the indicated percentage increase from 1946 to 1947 would probably be too high. For 1947, the indicated percentage increase as of April 1 for the metropolitan district over the 1940 population was applied to the 1940 population for the milk marketing area. No adjustment of the indicated April 1, 1947 population to an annual average basis was made as it was felt that this estimate may be somewhat higher than a complete enumeration would disclose. A constant deduction of 13,000 annually has been made to allow for those families who maintain cows and who therefore do not buy milk. No attempt has been made to refine this estimate because the changes would be too small to affect significantly the per capita consumption rates.

Data showing sales of fluid milk and cream in the Rochester, New York, marketing area were supplied by the Division of Milk Control of the New York State Department of Agriculture and Markets. The Department administers a State order regulating the handling of milk in the Rochester marketing area. This area is defined in Revised Official Order No. 129, dated April 1, 1948, as including the city of Rochester and the towns of Pittsford, Perinton, Irondequoit, Henrietta, Riga, Ogden, Parma, Penfield, Webster, Greece, Gates, Chili, Brighton, all in the State of New York. This is the same territory as that included in the original order except for the town of Mendon which was eliminated from the marketing area on November 1, 1940 and the town of Rush which was eliminated on May 1, 1942. Combined population of these towns in April 1940 was 550.

Sales reports published by the Rochester market administrator show utilization by classes of milk handled by dealers and producer-dealers. Class I milk means all milk or milk the butterfat from which leaves the plant where received as whole milk, buttermilk, chocolate milk, or any cultured or flavored milk drinks, and all other milk for which classification is not established in some other class. Plant loss in each class in excess of 2 percent of milk received from producers is class I milk. Class II-A is all milk the butterfat from which leaves the plant where received in the form of fluid cream sweet or sour, unless such cream was so handled or marketed as to classify the milk from which it was derived in some other class. It includes storage cream used in the manufacture of sour cream.

Table 9.- Sales of fluid milk and cream in the Rochester, N. Y., marketing area, population, and daily per capita consumption, 1940 - 47

Year	Annual sales 1/		Population using purchased milk 2/	Daily per capita consumption		
	Class I (Fluid milk)	Class II-A (Fluid cream)		Milk	Cream (milk equiv.)	Milk and milk equiv. of cream
	1,000 pounds	1,000 pounds	Thousands	Pints	Pints	Pints
1940	103,198	19,739	415	0.632	0.121	0.753
1941	104,275	21,008	411	.647	.131	.778
1942	113,091	20,765	405	.712	.131	.843
1943	122,775	13,798	403	.776	.088	.864
1944	126,292	11,700	407	.789	.073	.862
1945	133,554	13,564	412	.826	.084	.910
1946	142,133	20,252	457	.792	.112	.904
1947	141,235	18,799	470	.766	.103	.869

1/ Based on data supplied by the Market Administrator, Division of Milk Control, New York State Department of Agriculture.

2/ Estimated resident population.

NIAGARA-FRONTIER AREA

This area covers the county of Niagara, the cities of Buffalo, Tonawanda, and Lackawanna, 12 towns in Erie County, and 8 towns in Orleans County. Available population data include census estimates of civilian population for May 1, 1942, March 1 and November 1, 1943, and an estimate of the total labor force above 14 years of age in the Buffalo-Niagara Falls, New York Metropolitan District in November 1946. Population estimates for the milk-marketing area, which is closely similar to the metropolitan district, were made for 1942 and 1943 by the method of proportionate change. They are based on census reports of civilian population on May 1, 1942, and March 1 and November 1, 1943. Population estimates for both 1946 and 1947 were derived from the data in the report of the Bureau of the Census on the labor force in the Buffalo-Niagara Falls Metropolitan District as follows: (1) The 1940 total population in the district was taken as a base for calculation; (2) The 1940 age distribution about 14 years (21.5 percent under 14, 78.5 percent over 14) was arbitrarily adjusted by increasing the proportion of children under 14 by 1.5 percent;[16] (3) A total civilian population was calculated for the metropolitan district as of November 1946. This result - 913,000 - was adjusted upward slightly to achieve a 1947 annual average population, and downward slightly to achieve a 1946 annual average population. The figures in turn were related to the 1940 base population. Percentages secured were then applied to the total population in the milk-marketing area in 1940 in order to arrive at estimates of the milk-consuming population in this area in 1946 and 1947. The population estimate for 1944 was made by straight-line extrapolation of the absolute monthly change indicated by the March 1 and November 1 census estimates of civilian population in the metropolitan district, reduced to conform to the somewhat lower population of the milk-marketing area. The 1945 estimate is a simple addition of 1 percent to the 1944 figure and conforms with the average experience of several other urban areas in the region.

Data as to sales of milk and cream for the Niagara Frontier, New York area included in this report are based on milk classification under New York State Official Order No. 127 regulating the handling of milk in the Niagara Frontier milk-marketing area. Included in the area are the cities of Buffalo, Tonawanda, Lackawanna, Niagara Falls, Lockport, and North Tonawanda; the towns of Clarence, Newstead, Evans, Hamburg, Aurora, West Seneca, Cheektowaga, Lancaster, Amherst, Grand Island, and Orchard Park in Erie County; and the towns of Porter, Lewiston, Niagara, Wheatfield, Wilson, Newfane, Cambria, and Pendleton in Niagara County. By amendment to Order No. 127 effective December 1, 1946, the entire county of Niagara was included in the marketing area rather than the towns in the county specified above. Also added to the marketing area at the same time were the towns of Yates, Ridgeway, Shelby, Carlton, Gaines, Albion, Barre, and Kendall in Orleans County. Two series of milk and cream sales for the marketing area are contained in this report. One, which covers the period 1939-47 is, by adjustment, homogeneous throughout. It covers the marketing area as defined up to December 1, 1946.[17] The other series, which covers the years 1944-47, extends back to January 1944 the sales data for the marketing area as defined December 1, 1946 and thereafter. This series was supplied directly by the Division of Milk Control, New York State Department of Agriculture and Markets.

Figures relating to utilization of milk for 1939-47 represent class I (fluid milk) and class II-A (fluid cream) as reported for the market pool with some adjustments.

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[16] Rochester, Baltimore, Boston, and Washington D.C. showed a 2-percent increase in the under-14 group between March 1940 and April 1, 1947.

[17] Information for use in continuing this series through 1947 was supplied by the Division of Milk Control, New York State Department of Agriculture and Markets.

In determining pool volume, sales by producer-dealers of milk produced on their own farms are excluded. Sales in the marketing area of milk brought in from outside sources during shortage periods have been included. Sales, by producer dealers, of milk not produced on their own farms are also included as are small quantities of milk regularly received from other than regularly approved producers

The series covering the 1944-47 period includes class I and II-A sales by producer-dealers of "own-herd" milk, except for a maximum of 100 quarts daily for each such producer-dealer not required to be pooled, sales of emergency or so-called "outside" milk, out-of-area sales, and sales in the area which was added to the marketing area on December 1, 1946. The small quantities of milk regularly received from other than regularly approved producers have been deducted from total class I and II-A sales.

It will be noted that the longer sales series, 1939-47, understates class I and II-A sales through failure to include such sales by producer-dealers of milk produced by their own herds. This information is not available for the years before 1944. On the other hand, the short series, 1944-47, which includes class I and II-A sales by producer-dealers of "own-herd" milk, except for 100 quarts each daily, also includes out-of-area sales. But it is likely that exempt sales by producer-dealers exceed out-of-area sales.[18] See table 10.

For purposes of calculating per capita rates the longer series has been used. The shorter series, shown in Appendix table 39, can be used, together with the given population estimates, for calculating per capita rates of consumption of fluid milk and cream. In later issues of this report, the short series is expected to replace the older series, as it conforms with the provisions of current revised State Order No. 127.

Class I milk is milk, the butterfat from which is used in whole milk, plain, flavored, or cultured, and in milk drinks such as buttermilk, chocolate, or other flavored milk drinks. Class I also includes plant loss in excess of 2 percent of milk received from producers and any milk not established as in some other class. Class II-A milk is milk the butterfat from which is utilized in the form of fluid cream. It includes storage cream used in the manufacture of sour cream. Dealers file monthly reports which are audited by representatives of the Market Administrator.

NEW JERSEY

Statistics relating to sales of milk, cream, and milk drinks for New Jersey included in this report were compiled by the New Jersey Milk Control Board. Dealers and producer-dealers who sell milk in the State are licensed by the Milk Control Board and all except some of the smaller producer-dealers are required to submit monthly reports on their operations. Dealers' books are audited by the Board. Compilation of the data concerning sales of milk and cream are prepared by the Board and published in a mimeographed monthly sales analysis report.

Annual figures on sales of fluid milk used for computing State average per capita consumption of milk include totals of dealers and producer-dealers reporting to the Milk Control Board, plus an estimated allowance for the small producer-dealers who are not required to file monthly reports. The allowance for

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[18] In 1946, 43 producer-dealers were in business. They could account for about 3,250,000 pounds of exempt class I and II-A sales. For the same year, out-of-area class I and II-A sales accounted for slightly less than 1,500,000 pounds of milk.

Table 10. - Sales of fluid milk and cream in the Niagara Frontier, N. Y., marketing area, population, and daily per capita consumption, 1939-1947

Year	Annual sales 1/		Population using Purchased milk 2/	Daily per capita consumption		
	Class I (Fluid milk)	Class II-A (Fluid cream)		Milk	Cream (Milk equiv.)	Milk and milk equiv. of cream
	1,000 pounds	1,000 pounds	Thousands	Pints	Pints	Pints
1939 3/	105,255	27,430	890	0.515	0.136	0.651
1940	181,116	48,050	894	.515	.137	.652
1941	191,712	50,001	898	.544	.142	.686
1942	219,369	46,497	901	.620	.132	.752
1943	250,936	32,925	899	.711	.093	.804
1944	261,708	30,356	892	.746	.086	.832
1945	271,589	34,961	900	.769	.099	.868
1946	285,520	46,542	950	.766	.125	.891
1947	286,110	41,764	960	.760	.109	.869

1/ Based on data supplied by the Market Administrator, Division of Milk Control, New York State Department of Agriculture and Markets.

2/ Estimated resident population, less estimated number on places where cows are kept.

3/ Based on 7 months, January, July-December, 215 days.

nonreporting producer-dealers is obtained by estimating their number and multiplying by an estimate of approximate sales per day. Allowance for sales not reported amounts to less than 1 percent of the total. Sales of milk to consumers, stores, hotels, restaurants, schools, hospitals, and bakeries are included in the sales reported by the Milk Control Board, but dealer-to-dealer transactions and route returns are excluded. Sales in New Jersey by out-of-State plants and dealers are included, whereas sales by New Jersey dealers outside the State are excluded.

Population figures used for computing per capita consumption represent the number of people who must depend upon purchased milk. The census estimate of the July 1 resident population was used as the total population for the State for each year. From this was deducted an allowance for people in families who were supplied by their own cows. The latter was obtained by multiplying the number of herds under T. B. test supervision in the State by an average number of people per farm derived from census records. The number of herds under T. B. supervision was appreciably greater than the number of farms enumerated by the census in New Jersey. The additional number appears to consist mainly of 1 or 2-cow herds kept in small towns and villages that supply the family with milk but that do not meet the census definition of a farm. The difference between total population for the State and the number of people supplied by their own cows as thus computed was used as the population depending upon purchased milk. See table 11.

PHILADELPHIA MARKETING AREA

This area covers all of Philadelphia County except a small portion north of Pennypack Creek, all of Delaware County, and a portion of Montgomery County, all in the State of Pennsylvania. As the milk sales series begins in April 1942, no earlier estimates of population were made. A 1942 population estimate was made on the basis of census estimates of civilian population in Philadelphia, Delaware and Montgomery Counties as of May 1, 1942 and March 1, 1943. It was assumed that the indicated decline in civilian population between May 1, 1942 and March 1, 1943 occurred at a constant monthly rate. A 1943 estimate was similarly constructed with the additional aid of the November 1, 1943 census estimate. This estimate indicated a gain of about 2 percent (annual rate) in the civilian population of Philadelphia, Delaware, and Montgomery Counties during the March-October 1943 period No population estimates were available for the years 1944 and 1945 and arbitrary estimates had to be made.

The indicated November 1, 1943 population was continued unchanged as an estimate of annual average population during 1944. An increase of 1 percent above this figure was made in assigning an estimate of population for 1945. The estimate of population for 1947 presented further difficulty since the census estimate of April 1947 covered the Philadelphia Metropolitan District, an area differing markedly from the sales area as defined under Federal Order 61. It was decided that the differences between the two areas precluded use of the method of proportionate change in calculating the 1947 population for the Philadelphia milk-marketing area. In all probability, the growth of population in Philadelphia County, which in 1940 comprised 82 percent of the total population in the milk marketing area, occurred during the 1940-47 period much more slowly than in those portions of the area which lie out toward the periphery. An unofficial estimate of population for Philadelphia County in 1947 was available. This figure (2,000,000) was combined with estimates of population in August 1946 for Delaware and Montgomery Counties, obtained from the Pennsylvania State Planning Board, and formed the basis of an estimate of population in the marketing area in 1947. An estimate of population for 1946 was made by determining the simple average

Table 11.- Sales of fluid milk, fluid cream (milk equivalent), chocolate drink, and buttermilk in New Jersey, population, and daily per capita consumption, 1934-47

	Yearly sales for fluid use 1/				Population using purchased milk 3/
	Milk 2/	Cream (milk equiv.)	Chocolate drink	Buttermilk	
	1,000 qts.	1,000 qts.	1,000 qts.	1,000 qts.	Thousands
1934	428,647				3,991
1935	435,410				3,983
1936	447,782		5,548	5,743	3,980
1937	455,698		8,167	6,615	3,986
1938	449,447		7,234	5,951	4,000
1939	460,637	126,600	7,547	6,134	4,029
1940	465,578	126,892	7,876	5,802	4,057
1941	494,772	121,589	8,864	6,596	4,074
1942	529,679	109,355	9,026	5,999	4,081
1943	586,049	67,309	9,027	5,576	4,064
1944	614,483	67,906	7,733	5,886	4,051
1945	643,583	90,946	7,857	6,048	4,031
1946	676,255	126,782	7,232	5,640	4,431
1947	662,845	115,061	6,097	5,470	4,553

	Daily per capita consumption				
	Milk	Cream (milk equiv.)	Milk and milk equiv. of cream	Chocolate drink	Buttermilk
	Pints	Pints	Pints	Pints	Pints
1934	0.589				
1935	.599				
1936	.615			0.008	0.008
1937	.626			.011	.009
1938	.616			.010	.008
1939	.626	0.172	0.798	.010	.008
1940	.627	.171	.798	.011	.008
1941	.665	.164	.829	.012	.009
1942	.711	.147	.858	.012	.008
1943	.790	.091	.881	.012	.008
1944	.829	.092	.921	.010	.008
1945	.875	.124	.999	.011	.008
1946	.836	.157	.993	.009	.007
1947	.798	.138	.936	.007	.007

1/ Compiled from reports of the New Jersey State Milk Control Board.

2/ Includes sales of grade A, grade B, vitamin D, Guernsey, certified, and chocolate whole milk as reported to the New Jersey Milk Control Board, plus an estimate for sales not reported to the Board.

3/ July 1 resident population as published by the United States Bureau of the Census, less the estimated number on places where milk cows are kept.

percentage change between 1946 and 1947 for the other urban areas, rounding to the nearest whole number (2) and applying the result.

Class I milk in the Philadelphia area is all milk sold or disposed of as or in milk skim milk, and flavored milk drinks for fluid consumption containing less than 18 percent butterfat. It includes all milk or skim milk disposed of from a handler's plant to retail establishments which dispose of milk for both fluid and other uses and also all other milk not accounted for as class II. Under such a classification system, the indicated class I sales overstate actual consumption of fluid milk by consumers even apart from those nonfluid uses (or losses) to which reference has already been made. In an effort to reduce this upward bias, preliminary rather than audited reports of the Philadelphia Market Administrator have been used in this report, Estimated sales of producer-distributors not included under Order 61 have been included. As class II sales include milk used for both fluid cream and for manufacturing and as Philadelphia obtains cream of bottling quality from other sources than producers under Federal Order 61, sales of class II milk cannot be used as a measure of consumption of fluid cream.

Examination of table 12 reveals a substantial increase in per capita consumption of fluid milk from 1942 to 1943 and an almost constant rate through 1946. The indicated rate of consumption for 1947 shows a decline of about 6 percent. Use of the census estimate of population in 1947 for the Philadelphia Metropolitan Distric in relation to the 1940 population for the same area as a measure of percentage increase for the population of the marketing area would have resulted in a population estimate of 2,725,000 and an indicated per capita fluid milk consumption rate of .70 pint during 1947. This consumption level would be below that for 1942 (.72 pint).

Table 12.- Sales of class I milk in the Philadelphia, Pa. marketing area, population and daily per capita consumption, 1942-47

	Annual sales of class I milk 1/	Population using purchased milk 2/	Daily consumption per capita
	1 000 pounds	Thousands	Pints
1942	3/504,118	2,375	0.718
1943	727,384	2,377	.780
1944	729,789	2,390	.776
1945	760,387	2,415	.802
1946	776,610	2,480	.798
1947	744,120	2,530	.750

1/ Compiled from reports of the Federal Milk Market Administrator.
2/ Estimated resident population.
3/ April - December, 275 days.

ALLEGHENY COUNTY, PENNSYLVANIA

This marketing area is identical with Allegheny County. Available information as to population includes census estimates of civilian population for the Pittsburgh Metropolitan counties.[20] In 1940 the population of Allegheny County was 67 percent of that of the metropolitan counties. These counties differ from Allegheny County in that their population is much less dense, but in the absence of better information it was decided to estimate the population of Allegheny County by the method of proportionate change. This accounted for the years 1942 and 1943. The 1941 estimate was obtained by interpolation. The 1947 estimate is based upon the April 1947 sample survey of population in the Pittsburgh Metropolitan District which in 1940 had approximately the same relation, insofar as magnitude of population was concerned, to Allegheny County as had the four metropolitan counties. The chief difference lies in the greater density of population and the smaller area of the metropolitan district as compared to the metropolitan counties.

These differences could not be accounted for quantitatively in deriving an estimate of population for Allegheny County alone in 1947 and they were therefore ignored. It was apparent that extrapolation through 1944 of the absolute or percentage monthly change in population indicated by the census releases of March 1 and November 1, 1943 would give a 1944 annual population so low that a questionable pattern of population increase for following years would be unavoidable. Therefore, it was decided to assign, arbitrarily, a monthly population change during 1944 half as great as that indicated for the March - November 1943 period. The estimate for 1945 was reached by adding 1.5 percent to the 1944 figure. This was arbitrary, but it was supported by the experience of other urban industrial areas. Following determination of the 1947 figure, a single assumption of a given percentage change from 1946 to 1947 (2.5 percent) was made. Although the method may seem backward, it had the advantage of affording a much smaller range for error than would an assumption of percentage change for 1945 to 1946 when very large shifts in population occurred.

In 5 of the 11 years prior to 1937, studies of milk and cream consumption in the Allegheny County, Pennsylvania area were made by staff members of Pennsylvania State College.[21] In response to requests from dairy groups interested in the market, the Bureau of Business Research of the University of Pittsburgh undertook to follow up the last survey (relating to November 1936) with regular monthly estimates of sales of milk and cream by pasteurizing distributors. From May 1937 through August 1938, estimates were prepared by this agency, then the series was taken over and carried forward regularly by the Economics Department of Pennsylvania State College. A comprehensive summary and analysis of the data showing sales and consumption was prepared by C. W. Pierce, Professor of Agricultural Economics.[22]

Estimates of monthly sales in Allegheny County were based on regular monthly reports from 25 to 30 distributors, representing about four-fifths of the sales volume. Occasional surveys as to total market sales are made to check the level of the estimates. Complete surveys of the market were made for November 1936, in 1940, and for April 1944. For April 1944, the 26 dealers currently reporting in the sample handled 78 percent of the total sales of all handlers in the market.

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[20] Allegheny, Fayette, Washington, and Westmoreland Counties.

[21] Pierce, C. W., Sales of Milk and Cream for Fluid Use in Allegheny County, Pennsylvania, November 1936. Penna. Agr. Expt. Sta. Jour. Ser. 788, 1937. (Processed).

[22] Pierce, C. W., Fluid Milk and Cream Sales, Allegheny County, 1936-44, Penna. Agr. Expt. Sta. Bul. 470, 1945.

On ~~the~~ monthly inquiry sent to dealers separate data are obtained on whole milk sales (over 3.25 percent butterfat) and for cream sales. Each is requested on a quart equivalent basis and separated between wholesale and retail sales. For each current month, sales reported by dealers are compared with sales by the same dealers the previous month. Monthly estimates of sales are based on the percentage change shown by dealers and estimated sales the previous month. Thus sales in the entire market are assumed to have changed by the same percentage as have sales by reporting dealers. Computations of changes in dealers' sales from the corresponding month a year earlier are made frequently for checking purposes.

The monthly estimates of sales include only dealers who pasteurize and they exclude a small amount of raw milk sold in Allegheny County. Yearly figures as to consumption of milk and cream, as shown in this publication, include an allowance for sales by distributors of raw milk. These data, supplied by Professor Pierce, are approximations based on analysis of license applications of raw milk distributors to the State Department of Health and for the last several years on projection of trend. In 1944, distributers of raw milk handled only about 2 percent of the total volume of sales. See table 13.

BALTIMORE, MARYLAND, MARKET

The marketing area in this case covers only the city proper. Reliance upon census estimates for May 1, 1942, March 1, 1943, and November 1, 1943 was exercised in developing annual average estimates of population for the years 1942 and 1943. The 1940 estimate was carried over unchanged to 1941 for want of evidence suggesting any significant change in that year. The April 1947 census estimate of total civilian population in the Baltimore Metropolitan District indicated a 25-percent increase above the level of 1940. This does not indicate that the civilian population of Baltimore City increased by an equal proportionate amount. The probability, borne out by the experience of other urban areas, is that a very large proportionate increase in population occurred outside the thickly settled central city and that a much smaller proportionate increase occurred in the central city. An increase of 10 percent above the 1940 level for the resident population of Baltimore proper has been selected as a reasonable estimate. For the intervening years of 1944-46, population estimates have been made which were largely guided by reference to the pattern of population change in other urban areas. A 2 percent decline was selected for 1944, an unchanged figure for 1945, and an approximate 4 percent increase for 1946.

Data showing sales of fluid milk and cream for Baltimore are compiled by the Bureau of Milk Control of the Baltimore Health Department. The Baltimore City Health Department licenses all milk dealers who do business in the city. The Bureau of Milk Control in the Health Department obtains monthly sales reports from milk distributors. The distributors report average daily gallons of bottled and bulk fluid whole milk sold in Baltimore City and also the quantity of milk separated daily into cream for sale as fluid cream.

As the Baltimore data cover sales of fluid whole milk only, and as this is also the case for Richmond, the indicated per capita consumption rates for fluid milk should be expected to fall below those of other markets in which skim milk or part-skim milk items are included in sales of class I or fluid milk. This is an important, although probably not the only, explanation for the fact that the absolute level of per capita consumption of fluid milk in Baltimore is lower than in most of the other marketing areas covered in this report. See table 14.

Table 13.- Sales of fluid milk and cream in Allegheny County, Pennsylvania, Population and daily per capita consumption, 1937-47

Year	Annual sales 1/			Population using purchased milk 3/	Daily per capita consumption		
	Milk 2/	Cream			Milk	Cream (milk equiv.)	Milk and milk equi of cream
		Amount	Milk equivalent				
	1,000 quarts	1,000 quarts	1,000 quarts	Thousands	Pints	Pints	Pints
1937 4/	76,342	3,234	19,282	1,383	0.451	0.114	0.565
1938	109,244	4,672	27,850	1,387	.432	.110	.542
1939	109,536	4,599	27,412	1,390	.432	.108	.540
1940	116,900	4,758	28,365	1,394	.458	.111	.569
1941	124,684	4,891	29,164	1,382	.494	.116	.610
1942	137,058	4,745	28,288	1,370	.548	.113	.661
1943	145,306	4,270	20,842	1,334	.597	.086	.683
1944	152,732	4,099	19,984	1,284	.650	.085	.735
1945	159,797	4,782	24,893	1,302	.673	.105	.778
1946	170,638	5,876	33,653	1,432	.653	.129	.782
1947	173,996	5,037	28,214	1,470	.649	.105	.754

1/ Based on data supplied by the Department of Agricultural Economics, Pennsylvani State College.

2/ Includes estimated sales of raw milk dealers, not covered by reporting handlers.

3/ Estimated resident population, less estimated number on places where milk cows are kept.

4/ Based on data for May-December, 245 days.

Sales data obtained from milk dealers include separate figures on deliveries of milk in the city proper and in the suburbs, but before 1940 only a combined total for cream was obtained. The data relating to cream shown in this report for the 1932-39 period are estimates of sales within the city. These were obtained by dividing the cream sales between city and suburbs in the same relationship as the milk sales. In this period, sales of milk within the city ranged from about 84 to about 90 percent of the total sales in both city and suburbs. Since 1940 the reports on sales of cream for the city alone were obtained separately. It should be noted that the cream sales shown in this report do not include emergency imports of cream for sale as fluid cream in the Baltimore market during certain wartime shortage periods. It was not possible, on the basis of the limited available information, to estimate the quantities of cream, or milk equivalent of cream, imported under temporary, emergency permits.

Table 14.- Sales of fluid milk and cream in Baltimore, Maryland, population, and daily per capita consumption, 1932-47

Year	Annual fluid sales 1/		Population using purchased milk 2/	Daily per capita consumption		
	Milk	Cream (milk equiv.)		Milk	Cream (milk equiv.)	Milk and milk equiv. of cream
	1,000 gallons	1,000 gallons	Thousands	Pints	Pints	Pints
1932	16,314	2,748	817	0.436	0.074	0.510
1933	16,667	2,766	822	.444	.074	.518
1934	17,844	2,505	828	.472	.066	.538
1935	18,157	2,680	833	.478	.071	.549
1936	17,651	2,725	839	.460	.071	.531
1937	17,778	2,899	844	.462	.075	.537
1938	17,440	3,119	850	.450	.080	.530
1939	18,076	3,123	855	.463	.080	.543
1940	18,979	3,184	860	.482	.081	.563
1941	20,296	3,093	860	.517	.079	.596
1942	23,766	2,836	880	.592	.071	.663
1943	28,570	2,212	927	.676	.052	.728
1944	28,466	2,793	910	.684	.067	.751
1945	29,829	2,527	910	.718	.061	.779
1946	29,516	2,748	943	.686	.064	.750
1947 3/	25,063	2,188	946	.635	.055	.690

1/ Based on data supplied by the Bureau of Milk Control, Baltimore City Health Department.

2/ Estimated resident population.

3/ January - November - 334 days.

WASHINGTON, D. C., METROPOLITAN AREA

This area, insofar as population and sales of milk are concerned, conforms as closely as can be estimated to the area lying within a 21-mile radius of the Washington, D.C., milestone.[23] The basis for selection of this area is the fact that the sales series for fluid milk and milk drinks used in this report is for an area described in this fashion. This series was obtained through the courtesy of the Dairy Branch, Production and Marketing Administration, U. S. Department of Agriculture, from the office of the Federal Milk Administrator for the Washington, D. C., marketing area under Federal Order No. 45. The series excludes sales of milk and milk drinks to military establishments except at Fort Belvoir, Virginia, but it includes sales to military personnel whose food came from civilian food supplies. The population estimates are for total resident population in the area. They are based on changes in population indicated by annual census data (July 1) for Washington, D. C., upon the May 1, 1942, March 1, 1943, and November 1, 1943 census estimates for metropolitan counties, and upon the April 1, 1947 census estimate for the Washington, D. C., Metropolitan Area.

In the estimating process, a July 1, 1940 population estimate was made for the area lying within a 21-mile radius of the Washington milestone. This base population was adjusted annually thereafter in the same proportion as the population changed in (1) the District of Columbia from 1940 to 1941, (2) the Washington, D. C., Metropolitan counties[24] from 1941 to 1943, (3) in the Washington, D. C., area from 1943 to 1946 with some upward adjustments to account for the more rapid rate in growth outside the District of Columbia than within the city, and (4) in the Washington, D. C., Metropolitan Area from 1946 to 1947. None of the population estimates contained herein are directly comparable with any census estimates because of differences in the areas involved.

A minor problem is presented by inclusion of Fort Belvoir in the sales series. Data are not available as to the strength of the Fort Belvoir population prior to and subsequent to 1944. During 1944, the year of peak strength, the annual average number of personnel was approximately 20,000, or 1.25 percent of the indicated total population in the marketing area. For the years 1941-43 and 1945 the number of personnel at the Fort was less on the average than 20,000. A further complication is the shift of the Fort Belvoir milk contract in May 1943 to a handler in another marketing area. Several months later the contract was again taken up by a Washington, D. C., handler. The Fort Belvoir personnel has not been included in the population estimates for the marketing area.

Some apparently unusual fluctuations are evident in the sales series for this area. Undoubtedly, the development and easing of supply stringencies are responsible for some of the sales fluctuation. Sudden changes in the population of Fort Belvoir may account for some other fluctuations. Before 1944, there was no organized method of obtaining supplementary milk supplies for the market. Indications that some limits might be put on sales of fluid milk by Government caused milk dealers to hesitate to enter into year-round supply contracts for emergency milk supplies. It was not until 1944 that a comprehensive system of obtaining supplementary milk supplies was developed. See table 15.

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[23] Described as located on or near the Ellipse, south of, and not far from the White House.

[24] District of Columbia, Montgomery and Prince Georges Counties in Maryland, Arlington County, Va., and Alexandria City, Va.

Table 15.- Sales of fluid milk and milk drinks in the Washington, D. C., Metropolitan Milk-Marketing Area, population, and daily per capita consumption, 1940-47

Year	Annual sales of milk and milk drinks 1/	Population using purchased milk 2/	Daily per capita consumption
	1,000 pounds	Thousands	Pints
1940	212,275	977	0.552
1941	256,712	1,098	.596
1942	319,135	1,193	.682
1943	364,003	1,288	.720
1944	363,727	1,317	.702
1945	390,138	1,298	.766
1946	398,622	1,241	.819
1947	93,399 3/	1,269	.761

1/ Based on data supplied by the Federal Milk Market Administrator.

2/ Estimated population of the area within a radius of 21 miles of the District milestone.

3/ Data for January-March only.

RICHMOND, VIRGINIA

The marketing area includes all places within a radius of 20 miles of City Hall and, with the exception of one small town,[25] it is identical with the Richmond Metropolitan District as defined by the United States Bureau of the Census. Available information relating to population consisted of census estimates of population for May 1, 1942 and March 1 and November 1, 1943 for the city of Richmond and for Henrico and Chesterfield Counties. The combined total population of Richmond and these two counties in 1940 was 266,000, compared with 248,000 for the Richmond milk marketing area. Population estimates for the milk marketing area for 1941-43 were based on these census estimates taken against the 1940 census data as a base. Population estimates for Richmond were available for July 1, 1944 and 1945. [26] These showed an almost constant population for the years 1943-45 and this indication was carried over in our estimate of population for the marketing area for 1944 and 1945.[27] Also available was an estimate of total resident population in the Richmond Metropolitan District as of December 1, 1947. This estimate, developed through use of Population Estimating Method I,[28] indicated a population of 282,000 for the metropolitan district. This figure was reduced 1 percent to obtain an estimate of the annual average population for that area in 1947 and increased by 2,000 to allow for the town of Ashland. The result - 281,000 - was taken as an estimate of the annual average milk-consuming population in the area in 1947.[29] An estimate of population for 1946 was obtained by assuming approximately a 1.5 percent increase in population in 1947 above the 1946 level. This gave a pattern of population for that year similar to the average experience of other urban areas for the years 1945-47.

Figures showing sales of fluid milk and cream in the Richmond market which appear in this report were supplied by the Richmond Cooperative Milk Producers Association. They were compiled by the Milk Market Board, a joint organization of milk producers and milk distributors, which handles the market pool and equalization account. In the Richmond market, class I milk means all whole milk sold or distributed as such for consumption in the Richmond area except that sold or used for manufacturing purposes. Class I milk includes two grades, Grade A and Guernsey or Jersey milk. Both grades of milk are produced and distributed under the same sanitary and health requirements. The special-breed milk is not standardized and usually contains from 4.5 to 5.0 percent butterfat. Before 1943 there were three grades of milk: grade AA, grade A, and breed milk. Grade AA represented milk testing 4.0 percent or more whereas, at that time, grade A required a minimum of 3.5 percent butterfat. When these separate grades were merged in a single grade - grade A - the butterfat-content requirement was raised to a minimum of 3.7 percent. Flavored milk drinks, mainly chocolate, and buttermilk are not included in sales of class I milk. This is probably an important reason for the relatively low per capita consumption of fluid milk reported from the Richmond area. See table 16.

Class II milk covers all milk used to produce cream for sale or for distribution as cream for consumption in the marketing area. Cream for ice cream, and buttermilk and chocolate or other flavored skim or part-skim milk drinks are in class III.

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[25] Ashland. [26] Virginia State Department of Health, Annual Report 38 (1945-46)

[27] Our estimate was rounded down from 261,000 to 260,000.

[28] As described in U. S. Census Bur. Special Report P-47, No. 4, April 30, 1947.

[29] From this figure, as from the others, was subtracted 5,000 as an estimate of the number of people living on places where cows are kept.

Table 16. - Sales of fluid milk and cream in Richmond, Virginia, population, and daily per capita consumption, 1935-47

	Annual sales 1/		Population using purchased milk 2/	Daily per capita consumption		
	Class I (Fluid milk)	Class II (Fluid cream)		Milk	Cream (milk equiv.)	Milk and milk equiv. of cream
	1,000 pounds	1,000 pounds	Thousands	Pints	Pints	Pints
1935	27,704	7,889	230	0.307	0.087	0.394
1936	30,038	7,483	233	.328	.082	.410
1937	31,899	7,439	235	.346	.081	.427
1938	32,262	6,979	238	.345	.075	.420
1939	33,330	7,009	240	.354	.074	.428
1940	34,869	7,322	243	.365	.077	.442
1941	37,555	7,442	244	.392	.078	.470
1942	42,318	7,420	250	.431	.076	.507
1943	47,535	5,455	256	.473	.054	.527
1944	52,591	5,068	255	.524	.051	.575
1945	57,906	5,677	255	.579	.057	.636
1946	62,546	6,324	272	.586	.059	.645
1947	61,360	6,079	276	.567	.056	.623

1/ Based on data compiled by the Milk Market Board, Richmond, Va., and supplied by the Richmond Cooperative Milk Producers Federation.

2/ Estimated resident population, less estimated number on places where cows are kept.

Table 17. Indexes of seasonal variation for average daily sales of fluid milk in selected northeastern markets 1/

Market	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Boston	98.9	99.1	100.2	99.9	101.0	101.2	98.0	98.9	99.1	102.6	101.1	99.2
Rhode Island	95.9	97.6	96.8	97.4	99.2	101.3	104.2	106.0	102.3	101.0	100.3	98.0
Connecticut	98	99	99	99	99	101	102	103	101	100	100	98
New York	97	98	99	99	103	105	100	96	103	101	99	97
Niagara Frontier	99	100	100	101	100	101	100	100	100	100	99	98
Rochester	99	100	101	100	101	100	98	96	100	101	100	100
Philadelphia	98.2	100.3	102.2	102.0	102.8	103.5	97.7	96.2	100.8	101.1	99.2	96.0
New Jersey	95.6	95.5	97.5	98.0	100.0	103.1	107.6	108.0	102.1	98.0	98.1	96.5
Allegheny Co.	98.0	100.0	101.4	102.5	103.6	102.4	98.1	97.5	99.7	99.9	98.5	98.4
Baltimore	98.0	99.5	100.6	100.4	102.1	101.2	97.7	97.0	101.2	102.6	100.6	99.1
Washington	99.2	101.8	101.1	103.7	102.6	100.9	94.8	94.1	100.8	103.8	99.7	97.4
Richmond	101.7	102.9	103.0	101.7	100.0	96.8	92.1	92.3	99.9	103.7	102.5	103.4

1/ Computed by finding the average ratio to 12-month moving average (centered) for each month. The monthly data used are given in the appendix.

Table 18. Indexes of seasonal variation for average daily sales of fluid cream in selected northeastern markets 1/

Market	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
New York	100	104	109	112	113	105	92	90	95	96	97	98
Niagara Frontier	95	97	100	103	112	105	96	102	97	95	98	100
Rochester	99	97	99	105	104	103	90	97	95	101	102	102
New Jersey	92	96	96	102	114	114	108	107	96	88	91	94
Allegheny Co.	102.5	103.8	103.4	108.7	106.3	99.1	88.8	87.2	94.7	97.9	101.6	106.0
Baltimore	98.7	99.9	101.0	107.2	116.9	103.9	92.1	89.0	91.1	98.3	100.7	101.2
Richmond	102.7	109.7	111.2	115.4	123.3	94.4	83.4	80.3	88.2	89.5	90.6	111.3

1/ Computed by finding the average ratio to 12-month moving average (centered) for each month. The monthly data used are given in the appendix.

Table 19 - Average daily sales of Class I milk in the Greater Boston marketing area, 1937-48 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1937								1,520	1,552	1,584	1,585	1,552	1,560
1938	1,552	1,564	1,592	1,605	1,616	1,624	1,524	1,576	1,584	1,647	1,651	1,632	1,598
1939	1,589	1,579	1,599	1,576	1,612	1,607	1,525	1,574	1,590	1,623	1,599	1,550	1,585
1940	1,570	1,575	1,569	1,571	1,601	1,548	1,517	1,471	1,566	1,602	1,587	1,558	1,561
1941	1,590	1,601	1,611	1,639	1,676	1,673	1,610	1,581	1,682	1,695	1,666	1,656	1,659
1942	1,670	1,683	1,702	1,717	1,763	1,781	1,730	1,745	1,796	1,769	1,779	1,725	1,742
1943	1,776	1,802	1,834	1,810	1,829	1,930	1,901	1,794	1,837	1,857	1,698	1,762	1,826
1944	1,925	1,849	1,887	1,859	1,938	1,904	1,871	1,856	1,915	1,889	1,889	1,859	1,879
1945	1,911	1,934	2,012	1,970	2,009	2,046	1,924	1,902	2,004	2,005	1,927	1,883	1,960
1946	1,963	2,029	2,087	2,080	2,121	2,161	1,942	1,883	2,002	2,079	2,023	1,944	2,026
1947	1,986	1,988	2,005	1,974	2,024	1,935	1,866	1,817	1,968	2,029	1,941	1,913	1,954
1948	2/1,941	2/1,945											

Index numbers, adjusted for seasonal variation, 1939 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1937								97.5	98.8	97.4	98.1	93.7	98.4
1938	99.0	99.6	100.3	101.6	100.9	101.3	98.1	100.6	100.8	101.3	102.2	103.8	100.8
1939	101.4	100.5	100.7	99.6	100.7	100.2	98.2	100.4	101.2	99.8	99.0	93.6	100.0
1940	100.1	100.3	98.8	99.2	100.0	96.5	97.7	93.8	99.7	98.5	98.2	93.1	98.5
1941	101.5	102.0	101.5	103.5	104.7	104.3	105.7	100.9	107.1	104.2	103.2	105.3	103.4
1942	106.6	107.1	107.2	108.5	110.2	111.0	115.3	111.3	114.3	110.0	110.2	109.7	109.9
1943	113.3	114.7	115.5	114.3	114.3	120.3	122.4	114.4	117.0	114.2	105.1	112.1	115.2
1944	116.4	117.7	118.8	117.4	121.1	118.7	120.4	118.4	121.9	116.2	117.0	118.2	118.5
1945	121.9	123.2	126.7	124.4	125.5	127.6	123.8	121.3	127.6	123.3	119.3	119.7	123.7
1946	125.2	129.1	131.4	131.4	132.5	134.7	125.0	120.1	127.4	127.8	125.2	123.7	127.8
1947	126.7	126.6	126.2	124.7	126.4	120.6	120.1	115.9	125.3	124.8	120.2	121.6	123.3
1948	123.8	123.8											

Based on data compiled by the Federal Milk Market Administrator's Office, Boston, Mass.

1/ Includes relief milk sales 1937-43 and excludes sales in adjoining areas throughout entire period.

2/ Sales in adjoining areas estimated at 6.0% of sales in marketing and adjoining areas.

Table 20. - Average daily sales of Class I milk in Rhode Island, 1934-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts	Quarts
1934							202,686	201,910	195,259	189,994	190,430	185,307	
1935	181,636	179,928	179,198	180,450	184,717	188,260	198,678	195,693	195,021	195,289	194,942	191,211	188,814
1936	178,986	193,091	181,734	183,011	188,033	194,172	201,349	203,447	197,298	195,579	192,476	191,083	191,152
1937	192,944	197,223	195,424	198,808	200,867	203,759	211,520	213,744	207,073	202,317	197,222	192,672	201,157
1938	191,157	191,332	192,226	194,967	192,707	196,945	199,257	206,328	200,415	195,246	196,416	191,490	195,727
1939	187,741	194,230	192,298	192,583	197,597	201,446	202,343	204,725	201,085	201,931	202,336	197,243	197,979
1940	197,717	206,995	197,964	200,011	201,790	205,386	211,008	208,646	207,636	206,437	208,054	203,944	204,047
1941	206,325	213,904	213,468	219,680	223,493	230,695	229,496	229,623	233,780	233,020	230,313	225,914	224,178
1942	225,488	233,291	233,961	241,020	240,911	249,004	261,622	266,750	264,383	266,913	264,691	257,011	250,513
1943	256,051	263,863	272,346	281,605	292,919	300,582	303,334	300,991	298,510	291,932	285,029	280,750	285,775
1944	288,180	304,955	299,582	302,628	309,024	312,295	312,891	321,722	308,454	302,318	302,968	293,960	304,063
1945	303,084	309,704	318,730	320,163	321,132	330,353	331,776	321,134	323,751	313,706	292,788	287,203	314,474
1946	303,412	306,186	316,368	322,926	321,606	326,665	317,218	308,705	311,195	309,530	300,359	291,931	311,149
1947	294,391	296,678	301,800	305,037	303,081	300,376	305,711						301,010

Index number, adjusted for seasonal variation, 1939 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1934							98	96	96	95	96	95	
1935	96	93	93	94	94	94	96	93	96	98	94	99	95
1936	94	96	95	93	96	97	98	97	97	98	97	98	97
1937	102	102	102	103	102	102	103	102	102	101	99	99	102
1938	101	99	100	101	98	98	97	98	96	98	99	99	99
1939	99	101	100	100	101	100	98	98	99	101	102	102	100
1940	104	103	103	104	103	102	102	99	103	103	105	105	103
1941	109	111	111	114	114	115	111	109	115	117	116	116	113
1942	119	121	122	125	123	124	127	127	131	133	133	132	127
1943	135	137	142	146	149	150	147	143	147	146	144	145	144
1944	152	157	156	157	157	156	152	153	152	151	153	151	154
1945	160	160	166	166	164	165	161	153	160	157	147	148	159
1946	160	160	165	167	161	163	151	147	154	155	151	150	157
1947	155	154	157	158	154	150	148						

Based on data compiled by the Rhode Island Milk Control Board.
Not adjusted for sales of non-reporting producer-dealers.

Table 21-Average daily sales of fluid cream in Rhode Island for selected months 1936-44 and by months 1945-47, expressed in milk equivalent terms 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average 2/
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts
1936	53.9			56.1			54.6			54.1			54.67
1937	58.5			52.1			53.6			45.7			52.48
1938	52.0			52.6			44.8			49.1			49.59
1939	57.9			63.0			47.2			54.2			55.49
1940	49.4			73.2			66.2			65.6			63.52
1941	71.3			77.3			68.6			71.4			72.09
1942	66.9			70.3			73.7			76.1			72.76
1943	52.0			55.5			56.4			48.7			53.12
1944	43.9			43.3			41.2			40.3			42.19
1945	43.2	45.5	49.3	41.4	46.3	46.1	44.4	47.5	72.0	74.7	64.1	61.1	53.01
1946	76.9	90.0	93.9	103.5	106.1	120.3	56.8	48.8	49.0	47.9	46.8	54.6	74.37
1947	52.6	59.7	49.7	58.2	65.8	65.3	51.9						57.52
	Index numbers, unadjusted for seasonal variation, 1939 = 100												
1936	97.1			101.1			98.4			97.5			98.5
1937	105.4			93.9			96.6			82.4			94.6
1938	93.7			94.8			80.7			88.5			89.4
1939	104.3			113.5			85.1			97.7			100.0
1940	89.0			131.9			119.3			118.2			114.5
1941	128.5			139.3			123.6			128.7			129.9
1942	120.6			126.7			132.8			137.1			131.1
1943	93.7			100.0			101.6			87.8			95.7
1944	79.1			78.0			74.2			72.6			76.0
1945	77.9	82.0	88.8	74.6	83.4	83.1	80.0	85.6	129.8	134.6	115.5	110.1	95.5
1946	138.6	162.2	169.2	186.5	191.2	216.8	102.4	87.9	88.3	86.3	84.3	98.4	134.0
1947	94.8	107.6	89.6	104.9	118.6	117.7	93.5						103.7

1/ Basic cream sales data (40% cream in quart units) supplied by the Rhode Island Milk Control Board. Milk equivalents calculated as follows: (1) milk equivalent test 3.95 % for 1936-43 and 3.90% for 1944-47, (2) weight of cream taken as 97.5% of weight of milk.

2/ Based on data for 123 days in 1936-44; 365 days in 1945-46; 212 days in 1947.

Table 22 - Average daily sales of Class I milk in Connecticut, 1938-47

Years:	Jan. :	Feb. :	Mar. :	Apr. :	May :	June :	July :	Aug. :	Sept. :	Oct. :	Nov. :	Dec. :	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1938	1,087	1,100	1,097	1,113	1,097	1,120	1,137	1,153	1,123	1,157	1,133	1,113	1,119
1939	1,117	1,130	1,130	1,137	1,153	1,160	1,180	1,197	1,193	1,173	1,187	1,163	1,160
1940	1,170	1,183	1,170	1,197	1,193	1,210	1,233	1,240	1,227	1,223	1,227	1,190	1,203
1941	1,197	1,220	1,220	1,233	1,237	1,260	1,293	1,313	1,320	1,337	1,347	1,320	1,275
1942	1,373	1,397	1,393	1,410	1,393	1,520	1,537	1,560	1,517	1,490	1,510	1,527	1,469
1943	1,533	1,543	1,560	1,563	1,553	1,570	1,613	1,627	1,587	1,567	1,567	1,537	1,570
1944	1,557	1,583	1,603	1,623	1,640	1,640	1,637	1,663	1,630	1,613	1,620	1,603	1,618
1945	1,627	1,670	1,657	1,687	1,707	1,773	1,807	1,777	1,790	1,740	1,693	1,610	1,712
1946	1,670	1,783	1,760	1,790	1,793	1,877	1,857	1,840	1,793	1,790	1,770	1,720	1,788
1947	1,740	1,757	1,773	1,833	1,877	1,873	1,930	1,917	1,910	1,880	1,813	1,767	1,840
					Index numbers, adjusted for seasonal variation, 1939 = 100								
1938	96	96	95	97	95	96	96	96	96	100	98	98	96.5
1939	98	98	98	99	100	99	100	100	102	101	102	102	100.0
1940	103	103	102	104	104	103	104	104	105	105	106	105	104.0
1941	105	106	106	107	108	107	109	110	113	115	116	116	109.7
1942	121	121	121	123	121	130	130	130	129	128	130	134	126.7
1943	135	134	136	136	135	136	136	136	135	135	135	135	135.3
1944	137	138	140	141	143	140	138	139	139	139	140	141	139.3
1945	143	145	144	147	148	151	152	148	153	150	146	142	147.3
1946	147	154	153	156	156	160	157	154	153	159	156	153	155
1947	153	153	154	160	163	160	163	160	163	162	156	155	159

Basic data compiled by Economic Service, University of Connecticut, from records of the Connecticut Milk Administration and the Connecticut Dairy and Food Commission. Includes Class I and I-A sales of Connecticut produced and imported milk by dealers and producer-dealers.

Table 23 .- Average daily sales of Class I milk in the New York marketing area, 1933-47 1/

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1938									7,009	7,112	7,053	6,822	
1939	6,800						7,085	6,994	7,029	6,970	6,822	6,672	6,931 2/
1940	6,676	6,768	6,771	6,697	7,008	7,115	6,925	6,598	7,116	6,876	6,822	6,735	6,842
1941	6,749	6,795	6,938	7,017	7,213	7,360	6,924	6,754	7,329	7,145	6,988	6,852	7,005
1942	6,798	6,898	7,095	7,067	7,338	7,578	7,278	7,159	7,382	7,256	7,233	7,040	7,178
1943	7,185	7,216	7,425	7,339	7,552	8,105	7,701	7,721	7,741	7,494	7,698	7,506	7,558
1944	7,643	7,680	7,769	7,598	8,024	8,151	7,893	8,051	8,098	7,958	7,934	7,835	7,887
1945	7,946	8,040	8,185	8,203	8,340	8,748	8,327	8,145	8,518	8,281	8,138	8,096	8,247
1946	8,335	8,545	8,792	8,762	8,907	9,148	8,658	8,268	8,752	8,680	8,766	8,417	8,668
1947	8,468	8,529	8,571	8,517	8,665	8,691	8,407	8,421	9,036	8,675	8,474	8,229	8,556
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1938									98.2	101.6	102.8	101.5	
1939	101.1						102.2	105.1	98.5	99.6	99.4	99.2	100.0
1940	99.3	99.6	98.7	97.6	98.2	97.8	99.9	99.2	99.7	98.2	99.4	100.2	98.7
1941	100.4	100.0	101.1	102.3	101.0	101.1	99.9	101.5	102.7	102.1	101.8	101.9	101.0
1942	101.1	101.6	103.4	103.0	102.8	104.1	105.0	107.6	103.4	103.7	105.4	104.7	103.6
1943	106.9	106.2	108.2	107.0	105.8	111.4	111.1	116.0	108.4	107.1	112.2	111.6	109.0
1944	113.7	113.1	113.2	110.7	112.4	112.0	114.0	121.0	113.4	113.7	115.6	116.5	113.8
1945	118.2	118.4	119.3	119.5	116.8	120.2	120.1	122.4	119.3	118.3	118.6	120.4	119.0
1946	124.0	125.8	128.1	127.7	124.8	125.7	124.9	124.3	122.6	124.0	127.8	125.2	125.1
1947	126.0	125.6	124.9	124.1	121.4	119.4	121.3	126.6	126.6	123.9	123.5	122.4	123.4

1/ Excludes Class I milk to outside markets. Includes relief milk and also the whole milk equivalent of butterfat in milk drinks.

2/ Estimated.

Based on data compiled by the New York Federal Milk Market Administrator.

Table 24.- Average daily sales of Class II-A (fluid cream) in the New York marketing area, 1938-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1938									2,200	2,211	2,162	2,184	
1939	2,166						2,365	1,881	2,201	2,337	2,448	2,588	2,412 1/
1940	2,408	2,520	2,670	2,677	2,783	2,662	2,203	2,138	2,305	2,430	2,378	2,452	2,468
1941	2,508	2,640	2,740	2,778	2,771	2,431	2,113	2,038	2,154	2,030	2,105	2,178	2,372
1942	2,163	2,184	2,372	2,532	2,422	2,189	1,987	1,929	1,909	1,878	1,706	963	2,018
1943	927	1,001	1,015	1,098	1,093	1,189	1,062	920	928	935	686	695	962
1944	753	855	904	931	1,090	1,062	1,071	904	830	869	848	918	920
1945	973	1,047	1,143	1,283	1,282	1,270	1,133	1,020	1,958	1,941	835	858	1,233
1946	1,165	1,543	1,643	1,756	1,793	1,528	1,163	994	1,090	1,019	763	1,089	1,294
1947	1,468	1,776	1,861	1,895	1,954	1,916	1,643	1,427	1,509	1,372	860	1,116	1,565
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1938									96.0	95.5	92.4	92.4	
1939	89.8						106.6	86.7	96.1	100.9	104.6	109.5	100.0
1940	99.8	100.5	101.6	99.1	102.1	105.1	99.3	98.5	100.6	104.9	101.7	103.7	102.3
1941	104.0	105.2	104.2	102.8	101.7	96.0	95.2	93.9	94.0	87.7	90.0	92.1	98.3
1942	89.7	87.1	90.2	93.7	88.8	86.4	89.6	88.8	83.3	81.1	72.9	40.8	83.7
1943	38.4	39.9	38.6	40.6	40.1	46.9	47.8	42.4	40.5	40.4	29.3	29.4	39.9
1944	31.4	34.1	34.4	34.5	40.0	41.9	48.3	41.6	36.2	37.5	36.2	38.8	38.1
1945	40.3	41.7	43.5	47.5	47.1	50.2	51.1	47.0	85.4	83.8	37.8	36.3	51.1
1946	48.3	61.5	62.5	65.0	65.8	60.3	52.4	45.8	47.6	44.0	32.6	46.1	53.6
1947	60.9	70.8	70.8	70.1	71.7	75.7	74.0	65.8	65.8	59.2	36.8	47.2	64.9

1/ Estimated.

Based on data compiled by the New York Federal Milk Market Administrator.

Table 25.- Average daily sales of Class I milk in the Rochester, N. Y., marketing area, 1940-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1940	284	285	282	286	288	283	275	274	281	283	281	283	282
1941	283	284	286	238	284	284	280	274	291	291	291	291	286
1942	290	299	301	302	309	309	312	311	322	324	321	318	310
1943	325	331	338	332	331	340	339	334	341	346	345	335	336
1944	344	349	347	345	346	343	334	346	344	352	354	338	345
1945	350	366	362	365	369	367	357	359	367	373	377	373	366
1946	385	392	393	362	406	402	387	372	394	397	393	384	389
1947	393	394	395	393	394	386	371	381	391	392	381	374	387
	Index numbers, adjusted for seasonal variation, 1940=100												
1940	101.8	101.1	99.9	101.4	101.1	100.4	99.6	101.1	99.6	99.3	99.6	100.4	100.0
1941	101.4	100.7	100.4	102.1	99.6	100.7	101.4	101.1	103.2	102.1	103.2	103.2	101.4
1942	103.9	106.0	105.7	107.1	108.5	109.6	112.8	114.9	114.2	113.8	113.8	112.8	109.9
1943	116.3	117.4	118.8	117.7	116.3	120.6	121.7	123.4	120.9	121.6	122.3	118.8	119.1
1944	123.0	123.8	122.0	122.3	121.6	121.6	120.9	127.7	122.0	123.8	125.5	119.9	122.3
1945	125.5	129.8	127.0	129.4	129.4	130.1	129.1	132.6	130.1	130.9	133.7	134.0	129.8
1946	137.9	139.0	139.7	138.4	142.6	142.6	140.1	137.6	139.7	139.4	139.4	136.2	137.9
1947	140.8	139.7	133.7	139.4	138.3	136.9	134.4	140.8	133.7	137.6	135.1	132.6	137.2

Based on data compiled by the Market Administrator, New York State Department of Agriculture and Markets.

Table 26.- Average daily sales of Class II-A (fluid cream) milk in the Rochester, N. Y., marketing area, 1940-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1940	53	54	57	56	59	54	45	53	47	54	56	59	54
1941	54	55	56	59	61	61	53	56	55	59 1/	62	60	58
1942	58	56	59	62	59	58	55	57	60	58	63	37	57
1943	38	37	37	39	39	35	39	43	44	42	31	28	38
1944	30	30	31	34	33	33	35	32	31	32	31	31	32
1945	33	33	36	36	38	35	36	36	60	49	25	30	37.16
1946	48	65	70	57	80	85	37	38	41	40	48	57	55.48
1947	51	56	54	56	57	57	50	47	47	45	46	51	51.50

1/ Information on Class II-A milk from dealers' own herds not available prior to October 1941.

Index numbers, adjusted for seasonal variation, 1940 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1940	100.0	103.7	107.4	98.1	105.6	96.3	92.6	101.9	90.7	98.1	101.9	107.4	100.0
1941	101.9	105.6	105.6	103.7	109.3	109.3	109.3	107.4	107.4	107.4	113.0	109.3	107.4
1942	109.3	107.4	111.1	109.3	105.6	103.7	113.0	109.3	116.7	105.6	114.8	66.7	105.6
1943	70.4	70.4	68.5	68.5	70.4	63.0	79.6	81.5	85.2	77.8	55.6	50.0	70.4
1944	55.6	57.4	57.4	59.3	59.3	59.3	72.2	61.1	61.1	59.3	55.6	55.6	59.3
1945	61.1	63.0	66.7	63.0	68.5	63.0	74.1	68.5	116.7	90.7	46.3	53.7	68.5
1946	88.9	124.1	131.5	100.0	142.6	153.7	75.9	72.2	79.6	74.1	87.0	103.7	101.9
1947	96.3	107.4	101.9	98.1	101.9	101.9	103.7	88.9	90.7	83.3	83.3	92.6	96.3

Based on data compiled by the Market Administrator, New York State Department of Agriculture and Markets.

Table 27.-Average daily sales of Class I milk in the Niagara Frontier, N. Y., milk marketing area, 1938-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1938										496	496	483	
1939	490						498	495	489	488	487	480	493 1/
1940	494	494	491	497	499	495	484	491	493	497	503	502	494.9
1941	497	507	515	526	517	530	533	530	545	537	533	532	525.2
1942	543	556	569	578	583	603	612	616	641	637	641	630	601.0
1943	645	659	674	666	674	705	703	704	703	705	713	696	687.5
1944	710	722	723	705	716	713	707	727	704	719	729	706	715.0
1945	721	754	751	752	745	745	734	740	747	749	755	739	744.1
1946	761	773	796	792	810	797	784	759	793	786	774	761	782.2
1947	775	787	782	786	792	775	757	793	813	806	779	763	783.9
Index-numbers, adjusted for seasonal variation, 1939 = 100													
1938										100.6	101.6	100.0	
1939	100.4						101.0	100.4	99.2	99.0	99.8	99.4	100.0
1940	101.2	100.2	99.6	99.8	101.2	99.4	98.2	99.6	100.0	100.8	103.0	103.9	100.4
1941	101.8	102.8	104.5	105.7	104.9	106.5	108.1	107.5	110.5	108.9	109.1	110.1	106.5
1942	111.2	112.8	115.4	116.0	118.3	121.1	124.1	124.9	130.0	129.2	131.2	130.4	121.9
1943	132.3	133.7	136.7	133.7	136.7	141.6	142.6	142.8	142.6	143.0	146.0	144.0	139.5
1944	145.4	146.5	146.7	141.6	145.2	143.2	143.4	147.5	142.8	145.8	149.3	146.0	145.0
1945	147.7	152.9	152.3	151.1	151.1	149.7	148.9	150.1	151.5	151.9	154.8	152.9	150.9
1946	156.0	156.8	161.5	159.0	164.3	160.0	159.0	154.0	160.9	159.4	158.6	157.6	158.7
1947	158.8	159.6	158.6	157.8	160.6	155.6	153.5	160.9	164.9	163.5	159.6	158.0	159.0

1/ Estimated.

Compiled from reports of the Market Administrator, New York State Department of Agriculture and Markets.

Table 28.-Average daily sales of Class II-A (fluid cream) milk in the Niagara Frontier, N. Y., milk marketing area, 1938-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1938										124	126	129	
1939	122						125	127	133	125	126	136	129.8 1/
1940	123	126	129	131	142	137	121	129	128	127	139	143	131.3
1941	130	137	144	146	158	144	134	142	126	124	125	133	137.0
1942	126	124	129	134	150	132	130	136	134	124	112	97	127.4
1943	90	95	98	96	113	92	99	93	96	83	55	72	90.2
1944	80	86	82	94	87	90	84	83	81	70	72	86	82.9
1945	72	85	92	93	99	90	86	91	133	119 2/	83 2/	106 2/	95.8
1946	100 2/	124 2/	161	176	184	182	92	99	92 3/	90	111	121	127.5
1947	103	115	121	125	135	127	113	109	100	99	110	114	114.4
					Index numbers, adjusted for seasonal variation, 1939 = 100								
1938										100.9	99.4	99.4	
1939	95.6						100.0	96.3	105.5	101.7	99.4	104.8	100.0
1940	99.4	100.2	99.4	97.8	97.8	100.2	97.1	97.1	101.7	103.2	109.4	110.2	101.2
1941	105.5	108.6	110.9	109.4	108.6	105.5	107.9	107.1	100.2	100.9	95.6	102.5	105.5
1942	102.5	98.6	99.4	100.2	103.2	97.1	104.0	102.5	106.3	100.9	87.8	74.7	98.2
1943	73.2	75.5	75.5	71.6	77.8	67.8	79.4	70.1	76.3	67.0	43.1	55.5	69.5
1944	64.7	68.6	63.2	70.1	60.1	65.3	67.8	62.4	64.7	57.0	56.2	66.3	63.9
1945	58.6	67.8	70.9	69.3	67.8	66.3	69.3	68.6	105.5	96.3	65.5	81.7	73.8
1946	80.9	98.6	124.0	131.7	126.3	133.3	74.0	74.7	73.2	73.2	87.1	93.2	98.2
1947	83.2	91.7	93.2	93.2	93.2	93.2	90.9	82.4	79.4	80.1	86.3	87.8	88.1

1/ Estimated.

2/ Includes "outside" milk brought in & sold as Class II-A milk during October 1945-February 1946.

3/ Includes cream withdrawn from storage September 1946-December 1947.

Compiled from reports of the Market Administrator, New York State Department of Agriculture and Markets.

Table 29.-Average daily sales of fluid milk 1/ in New Jersey, 1934-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts
1934	1,111	1,126	1,113	1,145	1,198	1,236	1,248	1,223	1,188	1,188	1,160	1,103	1,170
1935	1,132	1,145	1,147	1,147	1,159	1,184	1,279	1,306	1,239	1,194	1,191	1,139	1,189
1936	1,151	1,155	1,183	1,192	1,230	1,255	1,333	1,304	1,233	1,206	1,197	1,182	1,219
1937	1,161	1,180	1,194	1,214	1,253	1,296	1,352	1,346	1,238	1,230	1,220	1,138	1,243
1938	1,184	1,147	1,209	1,218	1,213	1,244	1,239	1,339	1,254	1,191	1,213	1,200	1,226
1939	1,196	1,210	1,226	1,207	1,256	1,304	1,331	1,353	1,278	1,251	1,237	1,229	1,257
1940	1,197	1,226	1,223	1,240	1,255	1,292	1,331	1,334	1,308	1,279	1,263	1,252	1,267
1941	1,253	1,274	1,237	1,326	1,345	1,379	1,417	1,436	1,415	1,384	1,348	1,343	1,351
1942	1,359	1,358	1,369	1,396	1,425	1,465	1,524	1,528	1,524	1,439	1,468	1,450	1,447
1943	1,469	1,522	1,548	1,575	1,588	1,687	1,702	1,703	1,642	1,594	1,604	1,574	1,602
1944	1,579	1,617	1,631	1,623	1,679	1,727	1,743	1,800	1,739	1,669	1,665	1,625	1,675
1945	1,669	1,700	1,735	1,721	1,742	1,858	1,861	1,892	1,817	1,778	1,694	1,651	1,760
1946	1,749	1,792	1,841	1,868	1,831	1,930	1,941	1,903	1,866	1,857	1,813	1,754	1,850
1947	1,755	1,783	1,806	1,825	1,829	1,840	1,871	1,885	1,863	1,819	1,741	1,733	1,813
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1934	93	94	91	93	95	95	92	90	93	96	94	91	93
1935	94	95	94	93	92	91	95	96	96	97	97	94	95
1936	96	96	96	97	98	97	99	96	96	98	97	97	97
1937	97	98	97	99	100	100	100	99	100	100	99	93	99
1938	98	96	99	99	96	96	95	99	93	97	98	99	97
1939	100	101	100	98	100	101	98	100	100	102	100	101	100
1940	100	102	100	101	100	100	98	98	102	104	103	103	101
1941	104	106	105	108	107	106	105	106	110	112	109	111	107
1942	113	113	112	113	113	113	113	113	119	121	119	120	115
1943	122	127	126	128	126	130	126	126	128	129	130	130	127
1944	131	135	133	132	134	133	129	133	135	135	135	134	133
1945	139	142	142	140	139	143	137	139	142	144	137	136	140
1946	146	149	150	152	150	149	144	140	145	151	147	145	147
1947	146	149	147	143	146	142	138	139	145	148	141	143	144

1/ Includes Grade A, Grade B., Vitamin D., Guernsey, Certified, and chocolate whole milk.
Based on data compiled by the New Jersey State Milk Control Board

Table 30.-Average daily sales of cream (fluid milk equivalent) in New Jersey, 1939-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Average
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts
1939		316	326	362	416	405	409	363	335	292	312	333	347 1/
1940	302	331	333	346	382	415	381	374	339	312	320	325	347
1941	317	334	331	362	394	378	349	350	307	279	296	302	333
1942	311	294	280	314	356	328	325	413	284	263	262	165	300
1943	144	154	170	177	192	248	240	203	180	166	167	172	184
1944	144	159	154	167	195	218	244	237	207	158	170	173	186
1945	167	201	205	218	238	241	272	273	357	337	250	227	249
1946	302	314	420	472	474	532	374	314	233	221	239	273	347
1947	261	285	296	325	366	395	373	364	302	268	277	270	315
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1939		95	98	102	105	102	109	98	101	96	99	102	100
1940	95	99	100	98	97	105	102	101	102	102	101	100	100
1941	99	100	99	102	100	96	93	94	92	91	94	93	96
1942	97	88	84	89	90	83	87	111	85	86	83	51	86
1943	45	46	51	50	48	63	64	55	54	54	53	53	53
1944	45	48	46	47	49	55	65	64	62	52	54	53	54
1945	52	60	62	62	60	61	73	73	107	110	79	69	72
1946	95	94	126	133	120	135	100	84	70	72	76	84	99
1947	82	86	89	92	93	100	99	98	91	88	88	83	91

1/ Includes estimate for January.

Based on data compiled by the New Jersey Milk Control Board.

Table 31.- Average daily sales of Class I milk in the Philadelphia marketing area, 1942-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1942				1,783	1,828	1,861	1,844	1,793	1,893	1,868	1,865	1,765	1,833
1943	1,868	1,911	1,930	1,975	2,038	2,101	2,022	2,028	2,037	2,012	2,006	1,934	1,993
1944	1,949	1,996	2,010	1,976	2,051	2,014	1,950	1,991	2,037	2,026	1,953	1,974	1,994
1945	2,010	2,051	2,092	2,113	2,106	2,162	2,053	1,967	2,141	2,153	2,096	2,053	2,083
1946	2,103	2,169	2,239	2,252	2,250	2,206	1,990	1,920	2,089	2,169	2,129	2,025	2,128
1947	2,050	2,073	2,085	2,090	2,057	2,001	1,884	1,930	2,100	2,137	2,044	2,022	2,039
	Index numbers, adjusted for seasonal variation, 1942 = 100												
1942				95.4	97.0	98.1	102.9	101.7	102.5	100.8	102.6	100.3	100.0
1943	103.8	103.9	105.7	105.6	108.1	110.7	112.9	115.0	110.3	108.6	110.3	109.9	108.7
1944	108.3	108.6	107.3	105.7	108.8	106.2	108.9	112.9	110.3	109.3	107.4	112.2	108.8
1945	111.7	111.6	111.7	113.3	111.8	114.0	114.6	111.6	115.9	116.2	115.3	116.7	113.6
1946	116.9	118.0	119.5	120.5	119.4	116.3	111.1	108.9	113.0	117.0	117.1	115.1	116.1
1947	113.9	112.8	111.3	111.8	109.2	105.5	105.2	109.4	113.6	115.3	112.4	114.9	111.2

Compiled from records of the Federal Milk Market Administrator.

Table 32.-Average daily sales of fluid milk in Allegheny County, Pa., 1937-47

Year:	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts
1937					303	309	294	297	305	302	296	287	
1938	287	290	296	301	299	297	284	283	281	283	280	278	288
1939	278	286	293	289	298	293	280	280	296	295	293	292	289
1940	297	303	304	313	316	315	305	304	313	314	311	316	309
1941	320	323	327	334	332	332	326	320	344	344	340	339	332
1942	346	347	358	363	370	374	367	362	381	386	365	373	366
1943	341	374	390	391	382	400	398	389	396	399	407	403	389
1944	400	411	413	406	417	414	397	399	412	411	418	408	409
1945	414	422	430	421	429	437	423	430	444	442	436	430	430
1946	443	456	461	466	471	473	453	440	459	471	469	457	460
1947	464	472	469	469	474	465	449	463	488	487	469	467	470
Index numbers, adjusted for seasonal variation, 1939 = 100													
1937					101	104	104	105	106	104	104	101	
1938	101	100	101	101	100	100	100	100	97	98	98	98	100
1939	98	99	100	97	99	99	99	99	103	102	103	103	100
1940	105	105	104	106	105	106	107	108	108	109	109	111	107
1941	113	112	111	113	111	112	115	113	119	119	119	119	115
1942	122	120	122	122	123	126	129	128	132	134	128	131	127
1943	120	129	133	132	127	135	140	138	137	138	143	142	135
1944	141	142	141	137	139	140	140	141	143	142	147	143	141
1945	146	146	147	142	143	148	149	152	154	153	153	151	149
1946	156	158	157	157	157	160	160	156	159	163	164	160	159
1947	163	163	160	158	158	157	158	164	169	168	164	164	162

Based on data compiled by the Department of Agricultural Economics, Pennsylvania State College.

Table 33.-Average daily sales of fluid cream in Allegheny County, Pa., 1937-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts	1,000 quarts
1937					13.6	12.4	11.6	11.9	13.1	13.5	13.7	13.7	
1938	13.8	13.9	13.6	13.8	13.4	12.8	11.4	11.1	12.0	12.1	12.5	13.3	12.8
1939	12.7	12.7	12.8	13.9	13.1	12.2	11.2	11.1	11.9	12.7	13.2	13.5	12.6
1940	13.0	13.4	13.3	13.9	14.1	13.0	11.4	11.1	12.4	12.8	13.3	14.0	13.0
1941	13.4	13.9	14.5	14.2	14.8	13.5	11.8	11.9	12.5	13.0	13.5	14.1	13.4
1942	13.4	13.7	13.2	13.8	14.1	12.9	11.9	12.2	12.7	13.0	12.5	12.6	13.0
1943	11.6	11.8	11.5	11.8	11.8	11.5	11.8	11.8	12.6	13.3	10.3	10.4	11.7
1944	10.7	11.0	11.4	11.5	11.5	11.5	10.9	11.3	10.9	10.4	11.2	11.6	11.2
1945	11.3	11.2	11.5	11.5	12.8	12.6	11.8	12.3	14.0	16.0	15.8	15.3	13.1
1946	15.6	16.4	17.9	20.8	21.1	20.5	13.9	13.4	12.6	12.4	13.9	14.8	16.1
1947	14.3	14.5	14.2	14.3	15.4	14.2	13.1	12.3	12.7	13.3	13.2	14.6	13.3

Index numbers, adjusted for seasonal variation, 1939 = 100

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
1937					102	99	104	108	110	110	107	102	
1938	107	106	105	101	100	102	102	101	101	98	98	99	102
1939	98	97	98	102	98	98	100	101	100	103	103	101	100
1940	101	102	102	102	106	104	102	101	104	104	104	105	103
1941	104	106	111	104	110	108	106	108	105	106	106	106	106
1942	104	105	102	101	106	103	106	111	106	106	98	94	103
1943	90	90	88	87	88	92	106	107	106	108	80	78	94
1944	83	84	87	84	86	92	98	103	91	84	87	87	89
1945	87	86	88	84	95	101	106	112	118	129	124	122	104
1946	121	125	137	152	157	164	125	122	106	101	109	111	128
1947	111	111	109	105	115	114	118	112	106	108	103	110	110

Based on data compiled by the Department of Agricultural Economics, Pennsylvania State College.

Table 34.- Average daily sales of fluid milk in Baltimore, Md., 1932-47

Year:	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
1932	45,225	45,733	46,271	45,593	46,684	45,484	43,053	40,515	44,443	45,096	43,610	43,297	44,575
1933	42,921	42,620	42,911	44,008	46,640	47,020	45,560	45,686	48,515	48,156	47,367	46,398	45,663
1934	47,773	48,829	49,678	50,372	50,970	50,190	48,695	45,627	47,938	48,500	47,877	50,212	48,887
1935	49,865	50,183	51,078	50,592	50,256	49,779	48,848	48,466	49,199	50,939	49,898	47,381	49,744
1936	46,535	47,249	47,579	48,008	50,172	49,427	46,191	48,779	49,394	49,629	48,486	47,291	48,227
1937	46,930	47,904	47,701	48,393	49,185	49,963	48,768	47,939	49,521	50,257	49,394	48,537	48,708
1938	47,725	48,188	48,634	48,195	48,354	47,454	45,930	47,287	47,200	48,127	47,670	48,621	47,781
1939	47,452	48,034	48,412	48,203	49,464	49,400	48,003	50,811	49,395	50,920	51,927	52,148	49,524
1940	50,923	51,808	52,096	51,869	51,652	51,659	50,603	49,772	53,807	52,695	53,949	51,542	51,851
1941	53,637	55,051	53,816	54,644	55,739	56,158	55,204	54,334	57,487	58,272	56,252	56,633	55,605
1942	56,562	56,851	57,863	60,949	64,173	66,962	67,365	68,124	70,829	71,782	68,550	70,932	65,113
1943	68,949	74,076	77,696	76,643	79,351	83,944	82,291	79,911	80,357	78,952	78,900	78,056	78,275
1944	76,442	78,947	80,043	77,190	79,409	77,349	77,705	76,718	79,051	77,100	76,297	76,479	77,775
1945	78,618	81,083	86,155	79,635	84,280	88,456	83,040	81,992	78,935	81,564	78,584	78,235	81,723
1946	82,147	82,811	85,186	86,632	84,853	83,312	79,171	76,953	76,716	78,605	78,431	75,334	80,866
1947	74,494	75,332	76,877	76,779	78,171	72,930	70,987	71,268	75,884	77,471	75,279	--	1/75,038

Index numbers, adjusted for seasonal variation, 1939 = 100

1932	93	93	93	92	92	91	89	84	89	89	88	88	90.0
1933	88	86	86	89	92	94	94	96	97	95	95	95	92.0
1934	98	99	100	101	101	100	101	95	96	95	96	102	98.7
1935	103	102	103	102	99	99	101	101	98	100	100	98	100.4
1936	96	96	95	97	99	99	95	102	99	98	97	96	97.4
1937	97	97	96	97	97	100	101	100	99	99	99	99	98.4
1938	98	98	98	97	96	95	95	98	94	95	96	99	96.5
1939	98	97	97	97	98	99	99	106	99	100	104	103	100.0
1940	105	105	105	104	102	103	105	104	107	104	108	105	104.7
1941	111	112	108	110	110	112	114	113	115	115	113	115	112.3
1942	117	115	116	125	127	134	139	142	141	141	137	145	131.5
1943	142	150	156	154	157	167	170	166	160	155	158	150	158.1
1944	158	160	161	155	157	154	161	160	159	152	153	156	157.1
1945	162	165	173	160	167	176	172	171	158	161	158	159	165.0
1946	169	168	171	174	168	167	164	160	153	155	158	153	163.3
1947	153	153	154	154	155	146	147	148	151	152	151		1/151.5

Based on data supplied by the Bureau of Milk Control, Baltimore City Health Department.
1/ Average of 11 months.

Table 35.--Average daily sales of cream (milk equivalent) in Baltimore, Md., 1932-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons	Gallons
1932	8,742	8,246	7,488	8,027	7,656	7,299	7,673	6,034	6,675	7,623	7,657	6,999	7,507
1933	8,117	7,492	7,581	8,363	8,838	7,835	6,363	7,443	7,544	7,387	6,893	7,079	7,578
1934	6,307	7,106	6,921	7,470	8,746	7,588	6,356	6,087	6,153	6,127	6,437	7,081	6,862
1935	6,617	6,832	6,574	7,743	9,008	9,299	7,263	6,754	7,327	6,661	6,686	7,352	7,343
1936	6,767	7,189	7,545	7,723	8,986	8,008	6,964	7,601	6,838	6,807	7,551	7,343	7,444
1937	6,682	7,242	7,676	8,069	9,340	8,337	7,997	7,408	7,868	7,536	8,429	8,698	7,943
1938	8,243	8,527	8,968	8,722	10,110	8,666	7,868	7,819	7,592	8,573	8,702	8,748	8,546
1939	8,474	8,319	8,518	9,483	9,024	8,010	7,980	7,640	8,222	8,694	8,885	9,429	8,557
1940	9,747	9,247	9,381	9,519	9,331	8,597	8,156	7,370	7,689	8,382	8,356	8,630	8,699
1941	8,395	8,999	9,172	9,447	9,972	8,453	7,652	7,470	7,571	7,632	8,047	8,900	8,473
1942	8,511	8,290	8,236	8,642	8,647	7,970	7,304	7,507	7,678	7,447	6,490	6,555	7,770
1943	6,057	6,695	6,308	6,714	7,309	6,150	6,082	6,200	6,450	4,888	4,845	5,091	6,061
1944	5,528	6,456	7,015	7,090	8,876	6,881	6,779	7,313	7,531	7,460	8,493	12,074	7,632
1945	7,478	8,111	8,290	5,862	6,885	6,526	5,599	5,687	6,917	7,136	7,240	7,426	6,923
1946	7,694	8,284	8,721	10,173	9,526	9,697	6,842	7,135	5,054	5,341	5,624	6,337	7,528
1947	5,469	6,740	6,406	6,464	7,508	7,490	6,357	5,752	6,313	6,883	6,707		1/6,550
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1932	104	96	87	88	77	82	97	79	86	91	89	81	87.7
1933	96	88	88	91	88	88	81	98	97	88	80	82	88.6
1934	75	83	80	81	87	85	81	80	79	73	75	82	80.2
1935	78	80	76	84	90	105	92	89	94	79	78	85	85.8
1936	80	84	87	84	90	90	88	100	88	81	88	85	87.0
1937	79	85	89	88	93	94	101	97	101	90	98	100	92.8
1938	98	100	104	95	101	97	100	103	97	102	101	101	99.9
1939	100	97	99	103	90	90	101	100	105	103	103	109	100.0
1940	115	108	109	104	93	97	103	97	99	100	97	100	101.7
1941	99	105	106	103	100	95	97	98	97	91	93	103	99.0
1942	101	97	95	94	86	90	93	99	98	89	75	76	90.8
1943	72	78	73	73	73	69	77	81	83	58	56	59	70.8
1944	65	76	81	77	89	77	86	96	97	89	99	139	89.2
1945	89	95	96	64	69	73	71	75	89	85	84	86	80.9
1946	91	97	101	111	95	109	87	94	65	63	65	73	88.0
1947	65	79	74	70	75	84	81	76	81	82	78		1/ 76.5

Based on data supplied by the Bureau of Milk Control, Baltimore City Health Department

1/ Average of 11 months.

Table 36.- Average daily sales of milk and milk drinks in the Washington, D. C. metropolitan milk marketing area, 1940-47

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1940	557.4	557.4	555.9	582.1	585.0	566.5	544.6	546.5	591.2	631.0	620.1	612.0	580.0
1941	639.1	666.6	682.0	703.2	703.6	686.7	672.5	684.8	746.5	764.7	745.1	743.7	703.3
1942	768.2	806.0	806.9	853.6	866.3	884.8	893.6	889.2	924.7	953.6	922.3	926.1	874.3
1943	932.5	956.1	1,003.2	1,137.9	1,080.4	999.3	979.3	957.7	972.2	933.9	986.4	972.0	997.3
1944	974.6	1,004.6	1,012.8	988.5	1,001.9	992.9	969.6	967.9	1,012.2	994.0	1,011.8	996.2	993.8
1945	1,030.7	1,063.9	1,105.5	1,062.8	1,085.8	1,108.7	1,060.3	1,064.1	1,069.0	1,096.8	1,067.6	1,011.8	1,068.9
1946	1,090.6	1,122.6	1,156.2	1,153.3	1,150.5	1,127.0	1,065.1	1,020.9	1,045.6	1,100.2	1,062.1	1,015.0	1,092.1
1947	1,026.5	1,040.2	1,046.8										
	Index numbers, adjusted for seasonal variation, 1940 = 100												
1940	96.9	94.4	96.5	96.8	98.3	96.8	99.1	100.1	101.1	104.8	107.2	108.3	100.0
1941	111.1	112.9	116.3	116.9	118.2	117.3	120.3	125.5	127.7	127.0	123.3	131.7	121.3
1942	133.5	136.5	137.6	141.9	145.6	151.2	162.5	161.6	158.2	158.4	159.5	163.9	150.7
1943	162.1	161.9	172.1	189.2	181.6	170.8	178.1	175.5	166.3	163.4	170.6	172.1	171.9
1944	169.4	170.1	172.7	164.3	163.4	169.7	176.3	177.3	173.1	165.1	175.9	176.3	171.3
1945	179.1	180.2	183.5	175.7	182.5	189.4	192.8	195.0	182.8	182.2	184.6	179.1	184.3
1946	189.6	190.1	197.2	191.8	193.3	192.6	193.7	197.1	178.3	182.7	183.7	179.7	188.3
1947	173.4	176.2	173.5										

Based on data supplied by the Federal Milk Market Administrator

Table 37.- Average daily sales of Class I milk in Richmond, Virginia, 1935-

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1935	76.6	76.6	76.7	77.5	79.4	73.9	70.2	69.1	74.2	78.4	78.5	79.8	75.90
1936	79.0	79.9	81.5	80.8	80.5	79.0	75.3	77.8	85.7	89.2	87.5	88.1	82.07
1937	88.2	89.7	88.4	89.6	87.8	85.0	80.7	80.7	87.6	90.6	90.1	90.6	87.39
1938	88.9	90.2	91.0	89.2	88.0	85.3	81.0	82.0	88.9	92.2	91.3	92.9	88.39
1939	90.8	92.5	93.4	91.8	90.3	87.9	83.6	85.0	92.6	95.4	95.4	97.3	91.32
1940	93.6	96.7	96.6	96.8	95.1	92.2	88.4	88.3	95.4	99.5	99.8	101.0	95.27
1941	100.4	103.1	104.3	105.5	102.7	99.7	95.5	97.5	105.4	108.3	106.8	107.6	102.89
1942	106.4	108.8	112.0	114.4	116.5	115.3	112.3	113.1	121.0	123.6	124.2	124.8	115.94
1943	122.6	127.3	131.9	130.4	128.3	129.5	129.7	129.0	135.8	133.3	133.4	131.7	130.23
1944	141.1	145.1	144.5	144.9	145.5	141.9	138.6	138.3	146.4	146.6	147.9	143.8	143.69
1945	150.2	154.8	160.0	156.2	159.8	157.0	153.1	156.0	162.6	166.8	165.4	161.6	158.65
1946	170.0	175.8	179.2	177.7	176.0	169.7	161.5	159.5	169.[illegible]	175.9	173.7	168.2	171.36
1947	171.4	172.9	175.6	173.4	171.6	160.6	156.7	157.1	171.5	173.5	168.0	167.4	168.11
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1935	82	82	82	83	87	84	83	82	81	85	84	85	83.1
1936	85	85	87	87	88	89	90	92	94	94	94	93	89.9
1937	95	95	94	97	96	96	96	96	96	96	96	96	95.7
1938	96	96	97	96	96	97	96	97	97	97	98	98	96.8
1939	98	98	99	99	99	99	99	101	101	101	102	103	100.0
1940	101	103	103	104	104	104	105	105	105	105	107	107	104.3
1941	108	110	111	111	112	113	114	116	116	114	114	114	112.7
1942	115	116	119	123	128	128	134	134	133	130	133	132	127.0
1943	132	135	140	140	141	146	154	153	149	141	143	139	142.8
1944	152	154	154	156	159	161	165	164	160	155	158	152	157.3
1945	162	165	170	168	175	178	182	185	178	176	177	171	173.7
1946	183	187	191	191	193	192	192	189	186	186	186	178	187.6
1947	185	184	185	187	188	182	186	186	188	183	179	177	184.1

Data compiled by the Milk Market Board, Richmond, Va., and supplied by the Richmond Cooperative Milk Producers Federation, Richmond, Va.

Table 38. Average daily sales of Class II milk in Richmond, Virginia, 1935

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds
1935	20.8	22.2	23.1	25.3	28.7	26.9	19.6	18.2	20.1	18.1	17.8	18.7	21.61
1936	20.8	21.8	23.4	21.4	24.5	19.3	16.7	17.1	18.6	18.8	19.3	23.6	20.44
1937	21.6	22.3	22.8	23.2	27.9	20.0	16.0	15.6	16.6	18.1	18.0	22.4	20.38
1938	19.2	21.3	21.0	22.8	23.0	17.8	15.5	14.4	16.2	17.2	17.6	23.5	19.12
1939	19.5	20.9	20.9	22.8	21.4	17.1	15.4	15.1	16.8	18.0	18.6	24.9	19.20
1940	19.1	19.8	21.3	22.9	23.5	19.2	15.8	16.1	18.4	18.8	19.9	25.2	20.01
1941	20.2	21.1	22.5	23.2	26.9	19.1	16.4	17.0	18.0	17.8	18.7	23.7	20.39
1942	19.2	20.0	21.1	23.9	25.2	18.5	17.9	18.1	19.2	20.6	20.7	19.5	20.33
1943	15.6	16.2	16.8	16.6	16.1	16.0	15.4	14.5	15.0	12.7	12.1	12.3	14.95
1944	13.3	14.1	13.0	12.2	14.7	15.0	14.8	14.4	14.1	13.6	13.4	13.4	13.85
1945	13.3	14.6	15.6	15.5	16.2	16.8	15.9	15.7	15.8	16.2	15.5	15.4	15.55
1946	16.3	17.4	18.5	18.8	18.6	18.5	16.9	16.4	16.4	16.6	16.8	16.7	17.33
1947	16.8	17.3	17.8	18.1	18.6	17.6	15.8	15.6	16.1	15.7	15.2	15.2	16.65
	Index numbers, adjusted for seasonal variation, 1939 = 100												
1935	105	105	108	114	121	148	122	118	119	105	102	87	113.0
1936	105	103	109	97	103	107	104	111	110	109	111	111	106.6
1937	110	106	107	105	118	110	100	101	98	105	103	105	105.6
1938	97	101	98	103	97	98	97	93	96	100	101	110	99.3
1939	99	99	94	103	90	94	96	98	99	105	107	116	100.0
1940	97	94	100	103	99	106	99	104	109	109	114	118	104.3
1941	102	100	105	105	113	106	102	110	106	104	108	111	106.0
1942	97	95	99	108	106	102	112	117	113	120	119	91	106.6
1943	79	77	79	75	68	88	96	94	89	74	69	58	78.8
1944	68	67	61	55	62	83	92	93	83	79	77	62	72.1
1945	68	69	73	70	68	93	99	102	93	94	89	72	80.9
1946	83	83	86	85	79	102	106	106	97	96	96	78	90.3
1947	85	82	83	82	79	97	98	101	95	91	87	71	86.7

Data compiled by the Milk Market Board, Richmond, Va., and supplied by the Richmond Cooperative Milk Producers Federation, Richmond, Va.

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